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TWELFTH ANNUAL REPORT

OF THE

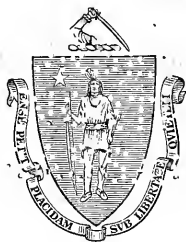
STATE BOARD OF INSANITY

OF

The Commonwealth of Massachusetts

FOR THE

YEAR ENDING NOVEMBER 30, 1910.



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APPROVED BY
THE STATE BOARD OF PUBLICATION.

THE STATE BOARD OF PUBLICATION
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USE IN THE SCHOOLS OF THE STATE

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The Commonwealth of Massachusetts.

STATE HOUSE, BOSTON, June 24, 1911.

To His Excellency the Governor and the Honorable Council.

The undersigned, members of the State Board of Insanity, respectfully submit their twelfth annual report, for the year ending Nov. 30, 1910, except on matters relating to general statistics, which cover the year ending September 30.

HERBERT B. HOWARD.

GEORGE F. JELLY.

MICHAEL J. O'MEARA.

HENRY P. FIELD.

WM. F. WHITTEMORE.

The Commonwealth of Massachusetts.

REPORT OF THE STATE BOARD OF INSANITY.

GENERAL MATTERS AND RECOMMENDATIONS.

THE DUTIES OF THE BOARD.

The Board has supervision of the institutions, public and private, for the insane, feeble-minded, epileptic, inebriates and drug habitués. It has the right of investigation and recommendation as to any matter relating thereto, but the local administration of each State institution is under the control of its own board of trustees, appointed by the Governor and Council.

The direct powers of the Board concern the interrelations of institutions and matters which are common to them all, such as the distribution and transfer of patients between them, deportation of patients to other States and countries, claims to support as State charges in institutions, etc. The Board is required to review and express its opinion of all estimates for appropriations, both those for maintenance and special purposes, such as new buildings and improvements, and to approve the final plans and specifications for new buildings before their erection.

The Board has the power to investigate the question of sanity and condition of any person restrained of his liberty by reason of alleged insanity, and to discharge any such person if, in its opinion, he is not insane, or can be cared for after such discharge without danger to others and with benefit to himself. It acts often as a board of appeal in the adjustment of differences and complaints.

THE DEVELOPMENT OF POLICY.

The Board in its first annual report, for 1899 (pp. 23-33), and its special report to the Legislature of 1900, recommended State care and support of the dependent insane, and further said (pp. 26, 27):—

Although the scope of this inquiry is limited technically to the insane poor, . . . it is evident that an adequate system should not ultimately ignore any class of dependents coming under the supervision of this Board, and should comprehend in outline such methods and principles as will satisfactorily provide for the needs and development of all.

To this end we wish to express our approval of the principle of State support and care of all such,—although it may not be wise to attempt so radical a change at a single stroke, but gradually, as each step is justified by experience and continued study.

The State assumed the care and support of such insane, outside of the Boston Insane Hospital, under the legislation of 1900, which became operative Jan. 1, 1904; of such feeble-minded and epileptic and the insane of the Boston Insane Hospital Dec. 1, 1908; and of such inebriates and drug habitués July 1, 1909.

The prospective inauguration of State care found this situation at the beginning of the hospital year 1900. Nearly 20 per cent. of the insane in State institutions were sleeping on temporary beds set up in corridors and day rooms. Outside of State institutions and the Boston Insane Hospital there were 900 insane cared for by overseers of the poor in city and town almshouses or private families.

Immediate provision, therefore, was necessary to relieve extreme overcrowding in State institutions, to receive the insane from almshouses, and to provide for a normal increase of the insane, which has averaged 399 annually during the last twelve years.

Such a situation and prospect impressed upon the Board the necessity of formulating a comprehensive plan of gradual and progressive extension of provision for this class. In its second annual report, for 1900 (pp. 26-29), the Board said:—

This necessity was foreseen from the investigations made by us in the preparation of our special report to the Legislature of 1900, wherein we endeavored to outline a comprehensive system of care of the insane, whose "basic principles should not only meet the present need, but anticipate the requirements of an increasing number of the insane, in order that a harmonious system might be established, capable of extension to any limit and flexible to any demand that might be made upon it."

Its gradual and progressive development was insisted upon, inasmuch as time and deliberation are required to plan and economically construct buildings suited to the needs of the different classes. It should be carried forward steadily, under the direction of permanent boards of trustees and superintendents, thus allowing small appropriations at any one time to a single board, careful planning, strict oversight by State and local authorities, and annual visits of the Governor and Council and committees of the Legislature. . . .

The fundamental principle of such a system is one of classification, mainly into three groups:—

(a) The acute and curable insane.

(b) The chronic insane of the *custodial* class, who require strict supervision and restraint for the protection of themselves and the public; and others of the *infirm* class, both of which are suitable for care on a plan having a compact arrangement of buildings.

(c) The *colony* class of chronic, able-bodied insane, who are capable of, or may be taught to do, some useful work toward self-support, and can safely be allowed greater liberty under homelike conditions. . . .

The first step in carrying forward such a policy was recommended by us to the Legislature of 1900, and endorsed by the establishment of the State Colony for the Insane at Gardner. This was intended, primarily, to take those patients of the colony class who had no friends, those whose friends had lost interest in them, and others who might properly be removed from their present locations after due consideration of the claims of locality, which justly demand nearness of patients to friends, so far as practicable.

These needs were further discussed in the Board's next report, for 1901 (pp. 29–34).

The hospital, colony and infirm ideas were elaborated in more definite form in the Board's annual report for 1902 (pp. 9–11):—

The hospital idea relates particularly to the acute, curable class, which constitutes about 7 per cent. of the patient population of our *hospitals*, and probably does not exceed 400 in *all* our public institutions for the insane at any one time. To such, aggregation in large

numbers is most detrimental. They need individual study and treatment, on a plane as high as that of the best general hospitals. To this end a small acute hospital for 50 patients, so planned as to be easily extended, should be erected in connection with each hospital, but sufficiently distant to avoid any unfavorable reaction from chronic patients. The resident physician should be well equipped for the study and medical treatment of his patients and for scientific research, and should have an adequate corps of trained assistants and nurses and full laboratory equipment. He should have the organization and control of his immediate work, but, inasmuch as administrative details would be largely eliminated in so small a unit, his duties should be almost strictly medical. . . .

The colony idea represents the home and industrial side of the care of the chronic insane. In its simplest form the quiet and harmless are classified in small groups in separate cottages, under ordinary conditions of living, and trained to engage in occupations which are agreeable and useful. Each group should constitute a complete and independent center, so far as possible, and have its own farm and workshops, and labor for its own development and support. Its size would vary with the character of the patients. Probably an average economic limit would be 100, distributed in four to six houses, so located as to be accessible to a common dining room and kitchen, and convenient to the fields, farms and shops.

Intelligent lay management, responsible only to the superintendent, would be sufficient. The requisite medical attention could be given by a nonresident physician, who could be called from the asylum department as occasion might arise, inasmuch as all but incidental illness should be treated in the infirmary connected therewith. So far as possible, every employee in the group should be a teacher and co-worker with patients.

Such a plan demands simple and cheap construction. Inexpensive one-story wooden buildings are appropriate and entirely safe for this class. They should be far enough apart to prevent spreading in case of fire.

Common ways of doing should be observed, and mechanical contrivances excluded wherever patients' labor can be substituted, since the employment of the latter is vital to the colony. Its economy further depends upon the absence of the necessity of close and prolonged supervision against dangerous and vicious propensities of patients. . . .

The asylum (infirmary) idea would find satisfactory expression in present institutions, after separation of the hospital and colony classes. The withdrawal would probably leave room for the accumulation of asylum cases for some years, without other extension than to meet special needs along the lines laid down in previous recommendations

of the Board, namely, infirmaries for the sick and feeble; special wards or buildings for the disturbed; farmhouses for working patients; and separate homes for nurses, both men and women.

Furthermore, the tuberculous are a menace to the health of their fellow patients, and have special requirements for their own treatment. They should be segregated in inexpensive, one-story wooden buildings, suitably located in connection with each institution. . . .

Intermediate to such an asylum and colony may be evolved other types, exemplifying in varying degrees colony methods, and adapted to the requirements of patients more or less unreliable in their tendencies, less capable of work, less readily taught to be useful, or wholly incapacitated in this respect. The care of such will be relatively more expensive, and necessitate material modifications in the plan above described. . . .

The evolution of these ideas would culminate in a uniform type of institution, comprising three departments,—the acute hospital, the custodial asylum (infirmary) and the industrial colony, separated by a distance variable but sufficient to allow practically independent existence, and obviate any harmful influence upon each other; each in immediate charge of a resident physician adapted to its peculiar requirements, but supervised by one general medical superintendent, who should be responsible to a single board of trustees. The size of each department would be proportionate to the number in its class of patients. In the aggregate, probably 2,000 would not be far from the economic limit of growth.

So long as present institutions are able to satisfy the demand for additional provision, without assuming too great a burden of construction, and so far as the claims of other localities do not contraindicate, it is advisable to continue their development; but ultimately each principal center of population, according to the urgency of its need, should command the accessibility of such an institution, to facilitate the early treatment of acute cases and promote the convenience of relatives and friends.

The beginning at any new point might take the form of colony, asylum or hospital, to meet the exigencies of the immediate situation, but eventually it should expand into the typical establishment.

Further emphasis was laid upon this need of classification and systematization in the Board's special report to the Legislature of 1908 (printed in annual report, 1908, pp. 129–132): —

The hospital for the acute and curable is necessarily the most expensive part of an institution. A large staff of physicians and nurses is necessary for the adequate examination, clinical study and treatment of the acutely ill. Extra stenographers are required, to record

histories, descriptions of mental symptoms and physical conditions, peculiarities of manner and conduct and details of treatment. It must have laboratory workers and costly equipment for scientific investigations, to be on equal footing with other departments of medicine in research into the nature, causes and results of mental disease and improvement of methods of treatment. In the present intimate relationship such expensive régime tends to spread out into the wards of the chronic, increasing unnecessarily the cost of their care. . . .

Furthermore, the organization, which was adequate to the good management of the original small institution, has been gradually outgrown in the great and growing establishments for the rapidly accumulating insane, and fails to satisfy the universal and imperative demand for expertness, both in business and medical science.

The parting of the ways seems to have been reached where the path of the administrator of institutional affairs diverges from that of the advanced student of medical science. There is need of separating as completely as may be administrative from medical functions.

Such a classification of patients and departments, with clear definition of spheres of responsibility, seemed to be the demand of steadily growing institutions, whose business administration was engrossing more and more the time and thought of the superintendents to the subordination of higher medical and scientific work.

Allusion to this tendency was made in the same report (1902, p. 33): —

Their business management is generally efficient and economical. The present activity in planning extensions and constructing new building taxes to the utmost the capacity of the superintendents, and, together with the increasing demands of growing institutions, will gradually necessitate compensation in two directions: —

(1) Medical and scientific work should be established on a broader foundation, allowing greater independence of executive functions. Its concentration in or in close connection with an acute hospital department, as recommended in the foregoing pages of this report, would accomplish much toward this end.

(2) The lay organization should be elevated and specialized by creating suitable departments with clearly defined duties, and appointing for each a competent and reliable head, thus relieving the superintendent of many time-consuming details. So far as the interrelation of medical and executive operations and their proper co-ordination may permit, an adequate corps of lay officers should obviate the necessity of requiring assistant physicians to do other than professional work.

The qualities of the executive and of the scientist in any high degree rarely coexist in the same person, and, if so existing, seldom pass the limits of mediocrity in symmetrical development, while either may be dwarfed by exclusive opportunity of the other.

The idealist would solve the problem through the lay business manager in control of administration and the scientist of medical treatment and research; but the experience of many failures teaches that the interrelations and mutual dependence of the two are so close, and so great the incapacity of the layman to comprehend medical and scientific wants, that such dual arrangement is fruitful of strife, wasteful of energy and almost barren of good results. . . .

Duties could be so clearly defined and responsibility so accurately determined that a general medical superintendent might harmoniously co-ordinate their interrelations, direct the larger business operations of all, and supervise the interests of the insane of an institutional district under the direction of a single board of trustees.

Such general medical superintendent should be primarily an executive of the highest business capacity. He should also be a thoroughly trained physician, broad in his conception of medical and scientific requirements, and appreciative of the value of the teachings of the laboratory and research activities. . . .

In 1896 the State hospitals began to appoint special assistant physicians, who resided at the institution and devoted their whole attention, undiverted by executive duties, to investigations in the laboratory and clinical observation of patients on the wards. Their quarters were small at first, but extension has been rapid and progressive, until four of the five State hospitals now have large, well-equipped laboratories, and two have erected special buildings with commodious space for their exclusive use. The scope of activities of these men has steadily broadened. They have contributed much to the better understanding of mental diseases; have met the other physicians in daily staff meetings for the discussion of their cases, and have stimulated their interest in medical matters and the study of their patients. But their advancement has been impeded in two directions. It has not been possible, with the close connection of all parts of large institutions, to give them control of their wards, so that they might directly apply the teachings of the laboratory and the suggestions of their clinical observation to the treatment of patients. Moreover, the opportunities for development and pecuniary inducements to long service have not been sufficient to attract and hold as many first-class men as would be desirable. In the small hospital for acute and curable patients, where administrative demands would be reduced to a minimum, the medical director and investigator should dominate in all arrangements for medical treatment, nursing and research. Here he should find the scope, independence and opportunity for advancement which are necessarily lacking under present conditions.

Every institution should have such a psychopathic hospital. In a large city it should be located near the general hospital and medical school, in order that disease of the brain may be associated with affections of other organs, its physicians stimulated by contact with investigators and teachers in other fields, and its facilities for investigation and abundance of clinical and pathological material supplement and complete the assemblage of general laboratories and clinics.

Each hospital should have the right of initiative in any line of research in which its medical director may be interested or specially fitted to pursue; but all should be united in systematic effort under the natural leadership of some one with superior capacity, attainment and advantage of environment. The medical director of such pre-eminence should supervise the medical and scientific work of all the hospitals of the Commonwealth, under the direction of the State Board. Physicians, scientists and students of the first order would be attracted to these research centers. They would be trained for the future teachers in mental diseases and physicians in the service of the institutions. In the wards of these hospitals, convenient of access from the general hospital, students of general medicine would become as familiar with mental symptoms as they now are with manifestations of physical disease. They would go into practice in the community able to recognize and interpret the early indications of derangement of the mind at the time when they alone may foresee its possibilities, and perhaps forestall its development into confirmed insanity by preventive counsel and curative measures.

Much effort has been made to improve conditions and promote stability of service of nurses and employees generally. This matter was considered in the Board's fourth annual report (1902, pp. 33-35): —

Progressive improvement is being made in the conditions under which the nurses live and work in the institutions. Training schools have been established in most of them, and their early inauguration in all the others is expected and earnestly recommended. Rapid progress is apparent in the erection of separate houses, where they may live apart from patients and outside the hospital wards. The old practice of requiring them to take their meals at the same time as the patients and upon adjoining tables is being abandoned. They will soon be provided with special dining rooms, or, in case of congregate dining halls, will have space reserved for their exclusive use. A two-fold advantage accrues from this arrangement: the nurses are relieved from all care of patients during meal hours; and the latter, by eating at a different time, receive the undivided attention of the former.

Comparative analysis of the service periods at the different institutions show that they are on the whole too long, and vary over too wide a range. Allowing for the weekly afternoon and evenings out, and the daily intervals of relief from all responsibility, the male nurses average on duty each week 82.19 hours in the thirteen public institutions, but only 75.72 hours in eight of them; the female nurses, 81.72 hours and 73.72, respectively. The longest weekly period is 96½ hours; the shortest, 70 hours.

In the consideration of this subject, account must be taken of the fact that their work is not laborious; that there are many hours when the oversight of patients is not exacting; that daily walks with patients afford opportunity to get out into the fresh air; that nursing and medical attention are furnished during illness; that an annual vacation of two weeks is granted without loss of pay; and that other compensations are made on account of special demands or merit. Nevertheless, their confinement to hospital routine is too protracted.

The above variations in the hours on duty in different institutions are explained:—

(1) By too great disparity in the length of day and night services. In most of the institutions the latter begins at 8 P.M. or earlier, in the others at 9 P.M. or a little later. It usually ends at 6 A.M., having a maximum length of only 70 hours a week, compared with a very much longer day service.

(2) By failure to relieve nurses from duty during meal hours.

In four institutions the nurses dine at the same time as the patients, and continue their oversight. In the others they dine by themselves, and are thus free from all responsibility for one and one-half to two hours daily.

(3) By variable frequency and length of the afternoon and evenings out. Usually they are allowed one afternoon and two evenings out each week, averaging about 9 hours altogether. The shortest period of such relief is 7 hours, the longest 18 hours.

Greater uniformity would seem to be desirable. The experience of those institutions in which the change has been made shows that the night service may properly begin at 8 instead of 9 P.M. If the nurses should also be freed from care of patients at meal time, the longest weekly period of service would be shortened to 79 hours. More liberality in granting time off duty or some other suitable arrangement should make a further reduction to 70 hours, which would be a reasonable standard to adopt. Some additional nurses would be required, but the larger outlay would be amply justified by the improved standard of nursing.

This matter of improving the service was again referred to in the Board's eighth annual report (1906, pp. 39, 40):—

Betterment of living and social conditions of employees should receive greater consideration. Of late much has been done in this direction, especially for nurses and attendants, by withdrawing them from bed-rooms opening directly upon the wards into pleasant rooms in separate houses erected for their use. Little provision, however, has been made for family life, even of assistant physicians and higher officers. Those who desire to marry are obliged to leave the service, or submit to discomforts which in the end become unendurable, as a rule.

The corrective is being attempted in a small way at a few institutions, where inexpensive houses have been erected for a family alone or a few nurses or employees in addition. Such efforts should be encouraged until suitable accommodation be made for desirable persons who wish to remain in the service after marriage. This would mean the erection of modest houses of variable size, according to the needs of different families and the desirability of their living alone or in association with others, in apartments separate from each other or in the same building. . . .

The Board believes that such a general policy of more liberal wages, suitable regulation of hours of work, and provision for retention of worthy married officers and employees, would gradually build up a stable and efficient corps of workers, who would form a small community about the institution, have local interests and attachments, and exert a salutary influence through a healthy public sentiment in favor of good conduct and right living, which would eventually eliminate many discouraging features of the present situation.

Early in its service the Board began the study of existing methods and facilities for the care and treatment of mental patients outside of insane hospitals. It said in its fourth annual report, for 1902 (pp. 13, 14):—

It is well known and much deplored that the insane who cannot be cared for at home, pending the legal formalities preliminary to treatment in a hospital, pass often into the custody of the police, and are lodged temporarily in a jail or police station. Thus the affliction of insanity becomes associated with the court and the criminal, rather than the hospital and the sick.

Patients are constantly coming to notice during the incipient stages of mental disorder who might never have to enter an insane hospital if they could obtain temporary relief from unusual stress, or be removed from unfavorable environment, or have the advice and supervision which might be afforded through the out-patient department of a hospital; but the general hospital is shut against them.

The medical schools generally provide scant instruction concerning

insanity, and rarer opportunity for its clinical observation. The physician, as a rule, enters upon practice in the community with meager knowledge of it, and is furnished no incentive to acquire greater familiarity, because the difficulties of home care of the insane are so great as to discourage the attempt. Hence, during the developmental and early stages of the disease, when preventive and curative measures would avail most, competent advice and adequate treatment may be beyond reach. The delay and neglect at this critical point, necessitated by the inadequacy of present arrangements, may materially detract from the chances of recovery. . . .

Such needs may be summarized under three heads: (1) provision for the observation and temporary care of the insane, pending commitment, apart from criminals, under suitably trained nurses and medical supervision; (2) provision, under the general hospital régime, for such patients as may be treated, in the main, on a voluntary basis, and for such other patients as may be properly dealt with through an outpatient department; (3) teaching and research centers.

The practical working out of a satisfactory plan to meet these needs will be difficult, and must be carried forward step by step in the light of actual experience. It is most desirable that the initiative should be taken as soon as possible at some large center like Boston.

Continuing inquiry as to the community aspect of its problem, the Board addressed to three thousand physicians throughout the Commonwealth a circular requesting their co-operation in gathering information, and the favor of their suggestion relative to existing "methods of caring for the insane pending their commitment to insane hospitals, and as to the need of provision for the treatment of persons on the border line of insanity or in the early stages of mental disease."

A summary of the information and suggestions elicited by the answers to the above-mentioned circular and the conclusions of the Board were printed in its sixth annual report (1904, pp. 27-33), thus in part: —

While appreciating the difficulties in the way, and differing radically as to any definite method of improvement, substantially all agree that present arrangements for dealing with the initial phases of mental illness are inadequate. . . .

It may be concluded that about 1 out of every 2 mental cases requires, under present conditions, commitment as insane. . . .

Accordingly, it is fair to assume that at least 2,000 mental cases remain under treatment in the community every year. . . .

In the opinion of the reporting physicians, 21.5 per cent. of their insane commitments might have been avoided if suitable provision for treatment had been available outside of institutions for the insane. If this opinion is justified, and the ratio holds for the whole State, 509 insane commitments last year might thus have been rendered unnecessary.

It is well known that the physician in general practice has usually received but meager instruction in mental diseases at the medical school, and has little incentive or interest to acquire familiarity with their treatment and the management of such patients after graduation. It is practically impossible for those without considerable means to obtain competent medical advice and appropriate care outside of an insane hospital. If their condition warrants remaining at home, the expense to the poor is prohibitive. Some of necessity go to the almshouse temporarily, but this is inadequate. The general hospital, as a rule, is closed to those known to be mentally affected; only 4 per cent. of the mental cases under review gained admission for any reason.

There would seem to be, therefore, imperative call for some public provision, affording them adequate treatment under conditions obtaining in ordinary illness, without the stigma of insanity.

The duty of rendering such service devolves upon the general hospital, so far as the voluntary relation of patient to caretaker can be maintained. It is hard to understand why the claim of such is not as obligatory upon the managers of public institutions of this character as that of any other acutely diseased person.

That such work should be undertaken in this way is the emphatic opinion of 469, or 84.5 per cent., of the physicians who have returned an answer to the question upon the circular of inquiry; only 86 or 15.5 per cent., dissent. . . .

Under no circumstances should the full functions of an insane hospital be assumed. Its noise and violence should be eliminated. Forced detention should not be permitted. Only suitable applicants who are willing to receive treatment should be accepted, and their stay should be limited to a short and definite period. Special wards should be set apart; or, preferably, a separate pavilion, after the type of Pavilion F of the Albany, N. Y., Hospital, should be built and specially equipped for this purpose. An alienist service should be created, both in the house and out-patient department.

In the judgment of reporting physicians, 29.9 per cent. of all mental cases observed and 21.5 per cent. of their patients committed as insane were suitable for treatment under these conditions. It cannot be doubted that such an arrangement would be welcomed by a considerable number of patients and their friends, who would thus be led to consent to much earlier care than is now possible.

A further deficiency in the present system of care of the insane is emphasized by the results of this inquiry. The legal formalities of insane commitment are considerable, requiring the certificate of two physicians and the order of a judge. . . . The necessary delay in completing these preliminaries to hospital treatment may be prolonged to some length, involving perhaps serious consequences to the patient, if he is in a critical stage of illness. Sometimes he may remain at home, and some public officials are considerably in the habit of assisting friends under special difficulties to afford such care; but, for reasons before stated, the usual recourse is to the lockup, police station or city prison.

Such recourse was had in 28.7 per cent. of all the insane commitments reported. . . .

In a large center this deficiency could be met by establishing a small emergency station, under general hospital auspices, in an accessible place and available at all times, where mental cases of every description could be temporarily cared for, and, after medical examination, distributed at the earliest moment to appropriate locations for full treatment. The extent of the work would be limited, and probably not sufficient to warrant independence; but it would be desirable for thoroughness of supervision and necessary for economy of administration to carry it on in connection with some branch of hospital service.

Failure to induce general hospitals to take action in this matter of the temporary care of such patients seemed to necessitate some arrangement by the State to promote the early treatment of incipient mental disease under the voluntary relation, which would also meet a permanent need in an adequate system of treatment of the insane. The Board advocated such an undertaking in its special report to the Legislature of 1908 (printed in annual report for 1908, pp. 132. 133): —

There is imperative need of public provision for the treatment of incipient mental disease, especially while the patient and his friends are unconscious of its presence or shrink from the idea of insanity. The present lack precludes preventive treatment and lessens chances of cure. Mental patients, appreciative of their condition and competent to determine the necessity of treatment, do not require the legal restraint of an insane hospital during the voluntary period, while they are willing or may be tactfully persuaded to co-operate with physicians and nurses. The stigma of insanity, with its social and industrial handicap, should not be forcibly and unnecessarily added to the burdens of such unfortunates. These requirements would best be met by opening psychopathic wards in general hospitals.

But general hospital managers complain that other calls upon their beneficence, which seem to them more pressing and pertinent to such service, overcrowd their wards and far exceed their resources. . . .

Meantime, something must be done. The want may be satisfied in part and a *permanent* need supplied in the system of care of the insane, by erecting in each institution district, under the management of its board of trustees and general medical superintendent, a branch for voluntary and convalescent patients, remote enough from other departments to escape unfavorable reaction from their inmates, but convenient for administration. Patients should be received directly from home at their own request, without formality. Their suitability should be ascertained by examination of the resident physician. The voluntary relation should be maintained throughout treatment. If forcible detention should become necessary, the patient should be removed. . . . Convalescents should be received from the hospital preparatory to return home. Certain neurological patients with mental symptoms might be received. . . . There should be a resident staff of physicians and nurses, and full equipment for hydrotherapy, massage, electrical treatment, physical training and other means of alleviating mental and nervous conditions. There should be pleasant grounds and walks for recreation and exercise in the open air.

While advocating such provision in general hospitals and specialized departments of State institutions, the Board realized that certain obstacles to the full usefulness of insane hospitals might be immediately removed by suitable legislation: —

(1) Extending more widely the use of the voluntary form of admission.

(2) Permitting temporary care of mental patients in insane hospitals for a limited period of short duration pending, —

(a) Commitment as insane.

(b) Observation for determination of insanity.

The extension of use of the voluntary form of admission was considered in the Board's sixth annual report (1904, pp. 22-24): —

For many years (since 1881) a person suffering from mental disease of such severity as not to render it legal to grant a certificate of insanity in his case has been able to gain admission as a voluntary patient to a hospital for the insane. . . .

The desirability of preserving the voluntary relation of patients to

the hospital in which they are treated cannot be doubted. The idea of force and imprisonment is thereby eliminated, and a spirit of co-operation and contentment encouraged. The stigma of formal declaration of insanity is averted. The expense of legal commitment, which is considerable, is saved. The necessity of obtaining additional authority for such treatment would seem to be obviated, inasmuch as such a patient cannot be detained against his will beyond three days, — a provision needed to allow suitable arrangements to be made for his care if he should be incompetent to look out for himself. . . .

The study of the Board leads to the conclusion that there are two obstacles to progress in this direction; first, the strict construction of the existing law imposes too great limitation of the class of patients eligible for such humane considerations; and, second, no provision is made for the support of voluntary patients who are in indigent circumstances, and cannot obtain assistance in paying their board. . . .

The Board recommends such legislation as will permit any person mentally affected to be received as a voluntary patient in an insane hospital, *if his mental condition is such as to render him competent* to consent to such treatment; and that the provisions of law governing the support of an insane person in such hospital shall be made applicable to such voluntary patient, provided the approval of the State Board of Insanity shall be obtained in writing.

Legislation authorizing temporary care of mental patients was recommended in the Board's tenth annual report (1908. pp. 134, 135): —

In *prolonged* detention due authority of law in each instance should be procured with exact compliance with every technicality of legal requirements; but in *short detention*, for a few days for temporary care, to prevent recourse to jail and lockup during the necessary delay of judicial procedure, the dictates of humanity, the safety of the public and sound reason demand the application of the principles of the quarantine, which have been enforced for a century without violating constitutional rights of the individual, whenever protection of the general public has necessitated isolation of infectious disease. . . .

The Board urgently recommends such legislation: —

(1) As will permit the superintendent of a public insane hospital or of the McLean Hospital to receive for temporary care not exceeding five days such mental patient as may, in his opinion, require reception for his own welfare or the safety of the public, at the written request of a responsible person acting under medical advice.

(2) As will authorize committal to a public insane hospital or the McLean Hospital, for such time and under such limitations as the

court may order, of any person who is found by two physicians, qualified to make a certificate of insanity under the provisions of section 35, chapter 87, Revised Laws, to be in such mental condition that his commitment to such hospital is necessary for his proper care and observation *pending the determination of his insanity.*

The Board further recommends in this direction on a later page: —

(1) That the superintendent of a hospital for the insane may, at the request of a physician or certain public officials, "send for, receive and care for in such hospital as a patient, for a period not exceeding seven days, any person who needs immediate care and treatment because of mental derangement other than delirium tremens and drunkenness."

(2) That no person suffering from insanity or mental derangement, delirium tremens or other form of delirium, or mental confusion, except drunkenness, shall pending examination, admission or commitment to an institution for the care and treatment of such persons, except in case of emergency, be placed or detained in a lockup, police station, city prison, house of detention, jail or other penal institution, or place for the detention of criminals. If, in case of emergency, such a person is so placed or detained, he shall forthwith be examined by a physician and shall be furnished suitable medical care and nursing, and shall not be so detained for more than twelve hours. Any such person who is arrested by or comes under the care or protection of the police, or any other such person who is in need of immediate care and treatment which cannot be provided without public expense, shall except in the city of Boston, be cared for by the *board of health of the city or town* in which such person may be. Such board of health shall cause such person to be examined by a physician as soon as possible, shall furnish him suitable medical care and nursing, and shall cause him to be duly admitted or committed to an institution for the care and treatment of such persons, or otherwise suitably provided for.

A review of the last thirty years shows that a slow and diminishing discharge rate has been the chief factor in accumulation of the insane in our public institutions. Effort has been made to counteract this tendency, —

- (1) By extending the limit of temporary absences on visit;
- (2) By authorizing boards of trustees to place suitable patients in private families; and
- (3) By providing means of temporary assistance to patients after discharge.

Such legislation was recommended in the Board's sixth annual report (1904, pp. 24-26): —

(1) It is often desirable to allow patients to leave an institution before they have reached a condition warranting final discharge, after which a return would necessitate the expense of a new commitment. This may be advisable to test their mental stability, to secure surgical treatment in a general hospital, or to afford them the pleasure of a visit at home which would otherwise be denied. For these and other reasons temporary absences are permitted. . . .

It has been found that the limit of sixty days is too short. The practice has grown up at some institutions of extending the period by having such patients return at the end of sixty days, and immediately, or after a night's stay, leave again, the visit being thus renewed repeatedly. Sometimes the same end is attained by placing the patient under family care, which requires visitation and unnecessary supervision by the State Board. The patient may be taken ill near the expiration of the period, and be unable to return within the limit. The superintendent may wish to continue his observation of the patient for a longer time before he feels justified in granting a full discharge. There is no doubt that friends of patients more readily remove them when they are assured that a return in case of failure would not require the expense and trouble of a new commitment. This provision promotes the discharge of patients, and has always been beneficent in its results.

The Board would recommend that the period of such temporary absence be lengthened to six months. . . .

(2) The insane boarded in families by this Board have been steadily increasing in number during the last two years. Two years ago there were 124; one year ago, 159; at present, 213. The time seems to be approaching when the scope of the work will require further provision for its development. As a first step to this end, authority should be extended to the trustees of the different institutions to do this work, so far as each may be interested to undertake it. This Board knows of no good reason against such extension, and believes that it would be in the line of progress. . . .

Experience in this work has shown the need of greater latitude in the discharge of patients. It sometimes happens that a patient has recovered, but is not immediately able, without assistance, to maintain himself; or he has reached such a stable mental condition that it is entirely proper and advisable to allow him to seek occupation on his own responsibility, either to stimulate his effort or to relieve him of the embarrassment of being in the legal status of insanity. In either case failure may result, necessitating his return to the custody of the Board. The strict construction of the present law does not permit

the Board to render any assistance to such a patient after he has been discharged, or to receive him back under its care without the expense and trouble of a new commitment.

The Board would recommend such legislation as will remedy such defects in the present law.

The broader scope of the functions of the hospital are outlined in the tenth annual report (1908, p. 134):—

Every hospital, especially in the cities, should be a center of instruction and counsel in mental hygiene, prevention of insanity and after care of discharged patients. The poor of the district should be encouraged to seek its advice, and granted free consultation while they may properly remain at home. An out-patient service similar to that of the general hospital should be maintained. There should be co-operation with local charitable agencies in ascertaining home conditions and in the endeavor to better or change the unsuitable.

The inadequacy of public provision for feeble-minded and epileptic children, and the consequences of their neglect, received early attention. In its third annual report (1901, pp. 34, 35) the Board said:—

According to the Massachusetts census of 1895 there were then in the State 1,868 persons classed as idiotic. Obviously the number must be larger now. About 500 such are at the present time inmates of city and town almshouses, and about 50 are boarded in private families by overseers of the poor. Undoubtedly many feeble-minded children are living in homes where they are neglected, idle and forming vicious habits. Continuance of these conditions will lead to their permanent dependence upon public support, whereas suitable training would convert many of them into useful and partially self-supporting patients in an institution.

The School for the Feeble-minded at Waverley is the only institution in Massachusetts which affords adequate training and supervision for these unfortunates. On Oct. 1, 1901, it had 422 male inmates, 280 female, a total of 702. The utmost limit of its capacity has been reached. Since 1892, 2,219 applications have been made for admission, of which 914 have been accepted, 1,305 rejected on account of insufficient accommodation. Pressure for admission has been so great that appeals have been made to the Governor and frequently to this Board. It has usually been necessary to deny them because of lack of room, although they would have been granted on their merits. Moreover, such children are sometimes committed to the insane hospi-

tals, because their need of care is so great, and no other place can be found for them.

The necessity for further provision for this class seems urgent. The Board recommends the immediate erection of additional buildings in connection with the School for the Feeble-minded at Waverley.

As soon as the Waverley School was approaching the maximum limit of extension, the Board urged the establishment of a new school, and also the enlargement of the hospital for adult epileptics to receive children of this class (seventh annual report, pp. 19-21): —

Provision for feeble-minded children who stand in urgent need of the care and training obtainable only in an institution adapted to their peculiar requirements is wholly inadequate at the present time in this Commonwealth. . . .

It would be not only humane and just for the Commonwealth to the care and training obtainable only in an institution adapted to industrial training which are denied them through the ordinary channels, but it would be wise and economical public policy: —

First, because some of them may be made thereby useful and independent members of the community, while most of them are susceptible of great improvement, sufficient to render them helpful and partially self-supporting in an environment created for them; whereas, without such assistance they will grow up in ignorance and idleness, and eventually become intractable or vicious inmates of almshouses, insane asylums and prisons, imposing in the end, under a system of neglect, a far heavier burden of expense, and entailing conditions of life and care most distressing to themselves and to their caretakers.

Secondly, because their segregation in such institutions would not only contribute to their comfort, happiness and protection from designing and unscrupulous persons, but is the most effectual preventive of the evils resulting from the reproduction of their kind in degenerate offspring, who would be not only a menace to the public safety, but the chief source of recruiting the inmates of our charitable and penal institutions.

Therefore the Board earnestly recommends the policy of gradual progressive extension of accommodation for this class in institutions, until the want in this direction shall be fully met. Existing centers should be developed to the maximum of economy of administration, so far as consistent with the primary purpose and the highest general efficiency.

In accordance with this principle, the School for the Feeble-minded has been enlarged during the last four years, until its capacity at Waltham will be 1,000 after the completion of buildings now under

construction, and that at Templeton 250 additional, being more than double the original capacity.

This Board is in entire agreement with the trustees of the school, that its future growth at Waltham should be in the main confined to rounding out its facilities for doing its necessary work; and at Templeton to extending the colony steadily, to receive the boys who have been trained in useful occupations, after they have passed the school age, and, not being properly returnable to community life, require opportunities for employment such as will be afforded in bringing the rough fields at Templeton under cultivation.

Hence it now becomes necessary to establish a new institution, which should be patterned after the general plan of the present school, and receive the benefit of the practical experience acquired by its trustees and superintendent in its development. . . .

The first year's accomplishment would be limited to the purchase of a suitable tract of land, comprising not less than 500 acres, and to the preliminary study of the problem, the preparation of plans for buildings, etc. A moderate appropriation should be made this year for these purposes. . . .

Provision for epileptic children is even more deficient than that for the purely feeble-minded. The general reasons urged in favor of adequate accommodation for the latter are equally applicable to the former. Furthermore, the young epileptic imperatively requires treatment for his epilepsy, and without its early availability loses his best chance of cure; whereas with it he has about one chance in ten to recover from his malady, as evidenced by the results of treatment of epilepsy at the Hospital Cottages for Children. Effort in this direction should go on in conjunction with that for the feeble-minded.

It would be advisable to extend the Hospital for Epileptics by establishing a department adapted to the care of children younger than fourteen years of age,—the present limit. This cannot be done immediately, inasmuch as the new building recommended this year is very much needed to improve the classification of adults, and will furnish the maximum of new work which can be undertaken at once. The Board, however, recommends action in this direction as the next step in the development of the hospital.

THE PRESENT POLICY OF THE BOARD.

These ideas and principles, broadened by experience and discussion, have gradually become systematized into the present policy of the Board, whose essential elements are, —

(1) State care and support of all dependents under supervision of the Board (see p. 10).

(2) Division of the State into institutional districts of such extent and location as would provide (see pp. 13, 15),—

(a) Accessibility of patients to their interested friends (see pp. 11, 13).

(b) Proximity of district institutions or their branches to large centers of population, facilitating early care, observation and treatment of mental patients (see p. 13).

(3) Provision, in each institutional district, of a mental sanatorium (see p. 22), psychopathic hospital (see pp. 11, 13, 16), colony (see pp. 11, 12) and infirmary (see p. 12), whose general character, organization and mutual relation should be substantially as follows:—

THE MENTAL SANATORIUM

should receive incipient mental patients for preventive and curative treatment under the voluntary relation. They should come directly from their homes upon their own request, by advice of friends or family physician, without formality. They should be removed if manifest symptoms of insanity should develop or forcible detention become necessary. The environment should be as free as possible from association or suggestion of insanity. Convalescents from other departments of the district institution might be received in separate houses. In a large center like Boston and vicinity the sanatorium should have an independent location, but in smaller districts it might be a separate department sufficiently removed from others to avoid unfavorable reaction but near enough for convenient administration. Its grounds should afford ample space for walking, recreation, open-air treatment and occupations. A resident staff of physicians, trained nurses and occupational teachers, with suitable equipment, should afford the most enlightened treatment, particularly in the form of physical therapeutics by water, heat, massage, gymnastic and Zander exercises, electricity, educational and occupational training, and other means of curing or alleviating mental or nervous conditions. Insistence upon the curative character of the work should prevent it becoming a retreat for chronic invalidism.

THE PSYCHOPATHIC HOSPITAL

should receive all classes of mental patients for first care, examination and observation, and provide short, intensive treatment of incipient, acute and curable insanity. Its capacity should be small, not exceeding such requirement.

An adequate staff of physicians, investigators and trained workers in every department should maintain as high a standard of efficiency as that of the best general and special hospitals, or that in any field of medical science.

Ample facilities should be available for the treatment of mental and nervous conditions, the clinical study of patients on the wards, and scientific investigation in well-equipped laboratories, with a view to prevention and cure of mental disease and addition to the knowledge of insanity and associated problems.

Clinical instruction should be given to medical students, the future family physicians, who would thus be taught to recognize and treat mental disease in its earliest stages, when curative measures avail most. Such a hospital, therefore, should be accessible to medical schools, other hospitals, clinics and laboratories.

It should be a center of education and training of physicians, nurses, investigators and special workers in this and allied fields of work.

Its out-patient department should afford free consultation to the poor, and such advice and medical treatment as would, with the aid of district nursing, promote the home care of mental patients.

Its social workers should facilitate early discharge and after care of patients, and investigate their previous history, habits, home and working conditions and environment, heredity and other causes of insanity, and endeavor to apply corrective and preventive measures.

THE COLONY

should provide for patients whose mental condition and characteristics prohibit a return to life in the community, but permit re-education, industrial training and occupation in agreeable

and useful pursuits; and should furnish an environment so adapted to their needs that they may become happy and contented colonists, enjoying the fruits of their labor, and, so far as possible, the comforts and personal liberty of a home.

The educational methods so effective in training the feeble-minded would be conducive to partial regeneration and re-education of damaged brains of the insane. Intercurrent excitement and intractability should be relieved after the same manner as like acute conditions in the hospital. In utilizing the productive energy of colonists the idea of treatment, education and service in ameliorating their condition should be as dominant as in the mental sanatorium or psychopathic hospital.

The main purpose of the colony would be realized in creating small, separate homesteads, with natural interests, employment and pastimes. They might cover a large acreage of rough land cut up into small farms, to be cleared and brought under cultivation by the patients, whose homes should be plain, inexpensive but attractive dwellings, arranged in family groups of variable size, providing for not more than 25 to 100 patients at each homestead, under the care of a good farmer, his wife and assistants. A large colony of many such homesteads might gradually be developed for colonists who have no interested friends or who would not thus be separated from them. Branches of the main colony might be located at different points, for the convenience of interested relatives living at a distance.

THE INFIRMARY

would be left to care for the residual patients not suitable for the colony or other departments of the district institution. Starting with the older establishments as a nucleus, extensions should be made to meet special requirements, such as detached buildings equipped for physical therapeutics, occupational training, open-air treatment and exercise for disturbed and untrustworthy patients, wards or buildings with easy access to the ground or open verandas for the feeble, conveniences for nursing the bedridden, pavilions or wards with open sleeping porches for isolation and treatment of the tuberculous, etc.

The central administrative, repair and construction departments should be located here.

The infirmary should afford not merely kind care and safe custody, but become a treatment center and training school for the colony.

The mental sanatorium, psychopathic hospital, colony and infirmary represent the types of provision and conditions appropriate for the four chief classes of mental patients, all of which are found in each institutional district. In the actual development of an institution, however, it would be exceptional that so distinct separation in their location, or so complete differentiation of their functions, as above set forth, would be possible, or, perhaps, desirable. The distinction is useful in promoting efficiency by organizing specifically to carry out a primary purpose in each, but too great emphasis should not be laid upon essential differences. These classes grade almost imperceptibly into each other. The same end is sought for all, — their improvement, adaptation to environment, and, thereby, their happiness and usefulness.

The intimacy of relation and frequency of interchange between these classes would require their supervision by the same board of trustees (see pp. 13, 15). The extent of an institutional district, therefore, would depend upon the aggregate of patients who may properly be placed under a single board without exceeding the limit of capacity desirable in each of the above units. Probably not more than 10 to 15 per cent. of the aggregate of patients at a given time would be suitable for the sanatorium and hospital together, while the remaining 85 per cent. would be divided about equally between the colony and infirmary. A reasonable limit would seem to be 2,000 in the aggregate, which might be exceeded in a populous district.

The sanatorium, hospital, colony and infirmary should each have its resident medical staff and special organization, with practical independence and direct responsibility to the trustees for medical and scientific work; but their general management and business administration, outside of the wards and labora-

toires, should be in the hands of an administrator, the executive agent of the trustees in such matters for all departments. An exception might be made of the colony or infirmary if the stage of development or unusual conditions should require their temporary control by the administrator.

The medical and scientific work, thus freed from exactions of administrative details, would have an independent and adequate foundation on which to attain the highest standard, while the business and executive demands would be concentrated under a single head in a way to promote efficiency and highest economy.

Inasmuch as all the problems of such an institution have a medical aspect, and require a sympathetic attitude and appreciation of their bearing from this viewpoint, the administrator must necessarily be a physician, but his *pre-eminent qualification* should be *executive ability*.

(4) Provision of comfortable but not expensive houses for higher officers who have families; modest cottages for nurses and employees who have families and hold positions of responsibility; small two-room apartment houses for married couples; houses of twenty to fifty rooms for unmarried nurses and employees; a weekly maximum of sixty hours on duty, with one day off in seven; such compensation as will attract and retain a competent and reliable class of nurses and employees, permit marriage and support of a family, and encourage the gradual growth of a village community of such persons about each institutional center, thus creating home interests and obligations conducive to stability and efficiency of service (see pp. 16–18).

(5) Encouragement of the voluntary relation of patients to hospitals for the insane, thereby avoiding the stigma of commitment and emphasizing the hospital character of their treatment (see p. 22).

(6) Reception of doubtful cases for the determination of insanity under conditions prescribed by a judge (see pp. 18, 22, 23).

(7) Reception of mental patients for temporary care, pending examination for commitment, upon request of a physician, board of health and public officials under whose care they come

unavoidably, in order that they may be sent directly to the hospital, without detention in a police station or other unsuitable place (see p. 23).

At the outset the duration of such care should be limited to a definite period of short duration, within which examination should be made by two duly qualified examiners in insanity; but eventually, with success of the experiment and warrant of public confidence, the period might be indefinite, and commitment required only when occasion should arise to necessitate. Should such method of admission become established, examiners in insanity for each hospital district should be appointed by the Governor or the court upon recommendation of the State Board of Insanity, one of whom should act with the family physician in certifying the insane for commitment.

(8) Medical care and nursing under direction of boards of health for patients needing public aid before admission to the hospital; prevention, so far as possible, of their detention in police stations or other unsuitable places during the interval of waiting; their conveyance to the hospital by the nurses caring for them during such delay; and, so far as possible, avoidance of attendance by the police, and particularly when in uniform (see pp. 23, 24).

(9) Preventive and early treatment of incipient mental disease by the family physician, who has had instruction in the mental clinics of the psychopathic hospital, so far as home conditions and resources permit (see p. 18); and,

(10) Public provision for such patients who are needy in detached pavilions connected with general hospitals, whenever appropriate conditions are not available in the mental sanatorium and psychopathic hospital (see pp. 19-22).

(11) Organization for social service in connection with each district institution to promote (see pp. 24-26), —

(a) Restoration and after care in the community of friendless recovered patients and other suitable patients in need of assistance and supervision outside of institutions.

(b) Investigation of home conditions, environment and previous history of the patient, heredity and other causative factors in mental disease.

(c) Application of preventive and corrective measures for the improvement of conditions for mental patients in the community.

(d) Dissemination of information helpful to the prospective patient and his friends in procuring proper treatment, and conducive to the growth of public interest and enlightened sentiment toward the insane and the institutions for such.

Such an organization should be maintained as an arm of the institution, should co-operate with the private charitable and other agencies in service to this class, and should seek the assistance of voluntary workers in populous centers.

(12) Adequate provision for feeble-minded and epileptic children, who are thus educated and trained in useful occupations contributing to their happiness and partial support, and to the reduction of the public burden resulting from the propagation of mental defectives (see pp. 26-28).

(13) Such methods of supervision as encourage, —

(a) Initiative, individuality and incentive to personal efficiency.

(b) Sense of responsibility and independence of thought and discussion.

(c) Uniformity of results by co-ordination through comparative information of methods and standards at each institution, and the resulting

(d) Voluntary co-operation under the compulsion of fact and reason, and the

(e) Subordination of personal opinion and arbitrary dictation as controlling factors.

(f) Provision by the State Board of expert advisers when not otherwise available to the individual institution; *e.g.*, the pathologist of the State Board now supervises the clinical and scientific work of the different hospitals, correlates the results of their investigations and formulates a co-operative plan of procedure; its expert accountant is employed in unifying accounts and financial methods. Such expert assistance might well be extended to provide a consulting engineer in electrical, heating, mechanical and constructural departments; a dieti-

tian to improve and standardize dietaries; a lecturer and teacher in stimulating interest and developing occupations and recreations for patients, etc.

THE PROGRESS MADE

and plans projected in carrying out such a policy during the period of twelve years, beginning with the organization of the Board Oct. 1, 1898, may be summarized as follows:—

State care and support of the insane, feeble-minded, epileptic, inebriates and drug habitués, so far as dependent and inmates of State institutions under supervision of the Board, were established by chapter 451, Acts of 1900; chapters 613 and 629, Acts of 1908; and chapter 504, section 1, Acts of 1909.

State care necessitated the reception into State institutions of approximately 900 insane from the care of overseers of the poor in almshouses and private families, and the purchase of the Boston Insane Hospital at a cost of \$1,000,000.

The overcrowding in State institutions in 1901, when the first record thereof was made, was so great that 19.79 per cent. of the patients slept in temporary beds set up in corridors and day rooms, with less than 500 prospective beds provided for by appropriations, compared with 11.75 per cent. in 1910, with 928 such beds in prospect. The present overcrowding is 5.56 per cent. in excess of the rated capacity of the institutions, which allows 100 square feet of suitable day and night space per patient.

Tolerance of the same degree of overcrowding as existed at the beginning of the period would have diminished the number of beds provided within it by more than 1,100.

The greater effort to meet the demand for adequate provision for feeble-minded and epileptic children resulted in an increase from 627 beds at the beginning to 1,989 beds at the end of the period, an increase of 217 per cent. The whole number of beds provided for all classes under supervision of the Board reached a total of 5,342, at an average cost of \$612.71 per bed, being 3,980 for the insane and 1,362 for the feeble-minded and epileptic.

It appears from the above that more than one-half of such increase was necessitated by change of State policy in the care of these classes, and less than one-half to their normal increase.

The establishment of a mental sanatorium was initiated under authorization of chapter 626 of the Acts of 1908, under which an admirable site at Fair Oaks, an old estate of 82 acres in the town of Lexington, was selected and bonded; but the purchase was not completed because of opposition from neighboring real estate owners and the townspeople generally.

Nevertheless, the need is urgent and finds expression annually in some form, the latest being an act of the Legislature of 1910 appointing a special commission to investigate whether the State should establish a "hospital or sanatorium for the cure of cases of nervous breakdown and for patients who are suffering from nervous or *mental disturbance not amounting to insanity*." This commission, after eliminating the large number of cases of neurasthenia, hysteria, etc., said in its report:

The smallest in number, but in many respects the most important from the point of view of hospital care, are those who have, or are likely to develop, a tendency to insanity. For these, care in a special institution may be deemed of great importance, both for the persons themselves, as bringing about a mitigation or cure of their condition, and for the State, as tending to diminish the number of insane dependents under its charge. Some provision for this purpose might very wisely be made by the State.

It may be anticipated that effort to establish such a sanatorium will be renewed soon after the completion of the new psychopathic hospital, to which it would be a necessary adjunct in supplementing and extending its treatment.

The psychopathic hospital movement has made substantial advance. The State appropriated, by chapter 470, Acts of 1909, \$600,000 for land, buildings and equipment for the purpose "of establishing in the city of Boston a hospital for the first care and observation of mental patients, and the treatment of acute and curable mental diseases," and for "general administration, an out-patient department, treatment rooms and laboratories for scientific research as to the nature, causes and results of insanity," such hospital to be a branch of the Boston State Hos-

pital and under the direction of its trustees. This hospital is now under construction on Fenwood Road, near medical schools, prospective general hospitals and laboratories.

Its original capacity will be 100 beds, with provision for future extension as required. Its business management will be in charge of the superintendent of the Boston State Hospital, but its director will be independent and responsible to the trustees directly for the medical, clinical, scientific and special work. Its location will enable it to serve especially Boston and its vicinity, whose mental patients aggregate about one-half the insane of the State, but it will hold an important relation to the other State hospitals in the study and treatment of exceptional patients, as a center of clinical and scientific investigation of special problems and co-operative effort in other directions.

The Westborough Hospital has constructed two detached buildings for the acute insane, which are equipped for hydrotherapeutic and special treatment.

The Worcester Hospital has been extended to provide treatment wards for female patients of the acute class. Request for a similar addition for male patients was made of the last Legislature. Not having been granted, it is repeated this year.

The Taunton and Boston hospitals are now constructing similar wards for such patients of both sexes.

The Worcester Asylum requests this year an appropriation for hydrotherapeutic equipment.

The Gardner Colony is planning a special building for this purpose.

Commodious buildings devoted wholly to laboratory and research purposes have been erected at the Westborough and Worcester hospitals. New laboratories have been equipped and organized at the Monson and Boston hospitals. In all there are now six well-equipped and organized laboratories connected with different hospitals, each having a trained investigator and other assistants giving their whole attention to the scientific and research aspects of mental problems.

A State pathologist has been appointed to supervise clinical and research work at the institutions.

The colony idea has had fullest expression. A large acreage of land has been acquired. At the beginning of the period the

State owned at the different institutions under supervision of the Board 3,108 acres; at the end 9,542 acres, an increase of 6,434 acres, more than 200 per cent. Approximately 5,000 acres were purchased for colony development. So large an acreage is necessary for separation of homesteads and occupation of patients who will gradually bring the land under cultivation.

In a densely populated State like Massachusetts, where communities are rapidly growing larger and nearer together, foresight in such a matter is important with reference to the segregation of these classes to prevent encroachment upon the rights of the public, and to preserve for the patients as much personal liberty as possible. The land is rough, rocky and cheap, costing less than \$25 per acre on the average. It will be transformed by colonists into fertile fields and beautiful parks. Its production of food supplies will be of great economic value in reducing the cost of support of the insane, and affording a more generous and varied dietary for patients than would otherwise be possible.

The first colony for the insane at Gardner was opened with a few working patients in 1902. It now has 625 patients living in central receiving and observation wards for about 100 of each sex, and eight independent farm and industrial groups, each having 12 to 100 patients, separated from each other at considerable distance on a tract of 1,600 acres of land.

The North Grafton Colony, a branch of the Worcester Asylum, eight miles out from Worcester, cares for both the quiet colonists and the worst class of disturbed patients from the asylum. A tract of 900 acres of land permits separation of individual groups so that they are independent of each other. There are three farm groups, each having 50 to 100 colonists. The disturbed patients are grouped in two separate centers, one for each sex. They are allowed as much liberty as possible, and encouraged to occupy themselves in many ways in the fields and woods, with gratifying improvement in their mental and physical condition.

The Westborough, Taunton and Danvers hospitals have purchased several outlying farms, one to three miles distant from the main plants, and have developed eight separate colony centers, providing for approximately 700 patients in all.

The Templeton Colony for feeble-minded, a branch of the

Waverley School, was projected earlier but wholly developed within this period. It now provides for 300 boys in five ideal homesteads on a tract of 1,800 acres of land. The new Wrentham School has one such colony for 50 feeble-minded boys. The Monson Hospital has two such colonies for epileptics.

Altogether there are now twenty-seven farm and industrial colonies where approximately 2,000 patients are living under conditions substantially representing the colony ideal, and producing results whose promise surpasses expectation. Appropriations for four additional colonies are requested this year. The confident anticipation is entertained that not less than 40 per cent. of the insane will gradually pass into such conditions, with enormous benefit to themselves and increase of their happiness and contentment, aside from the economic aspect of the situation.

The infirmary development has been mainly in connection with existing centers, appearing in the erection of nine special buildings for disturbed patients, five for the care of infirm and bedridden, seven detached pavilions and ten wards with open-air verandas for treatment of the tubercular.

Large provision for officers, nurses and employees has been made during the period in separate houses and parts of main buildings, separate from the wards of patients and exclusively devoted to their use. Houses have been provided for 4 superintendents and several other officers; tenements of five to six rooms for 22 families, usually on the lower floor of houses whose second stories are occupied by other employees, or, in a few cases, by nurses; two-room suites for 11 married couples, and single rooms for 36 other employees.

The beginning of the period found one home for 44 nurses at Danvers Hospital. It ends with twenty-eight separate houses and four upper stories of main buildings devoted to the exclusive use of nurses, to the number of 1,038. Two more nurses' homes are requested in the estimates for appropriations this year, and others are being planned.

The hours of duty have been reduced from an average exceeding eighty-four hours weekly to one of approximately sixty-five hours, while four institutions have reached the standard of sixty hours a week with one day off in seven. The uniform standard will soon be established.

The pay of nurses has been advanced approximately 25 per cent.; women from \$14 to \$20 a month, and men from \$20 to \$25 a month, as initial rates. One year's service or less entitles both to an advance of \$5 a month. The same advance is usually made after graduation from the training school or promotion to charge of a ward. Greater length of service and special merit are also recognized by suitable advances.

It has been the constant aim of the Board to correlate mental disease with physical disease, eliminating as much as possible the idea of restraint in their treatment, and promoting in insane hospitals the use of methods prevailing in general hospitals so far as mental infirmity permits.

There existed prior to 1905 certain provisions of law which were effectual obstacles to any large use of the voluntary or other form of admission to insane hospitals, which might require subsequent commitment while the person was an inmate of the hospital. In the payment of commitment expenses the principle is recognized that they should be paid by the county of which the committed person is an inhabitant as a result of voluntary choice of residence, and where mental disease presumably develops. Inasmuch as temporary admission to an institution makes the person an inhabitant of the county in which it is located, these expenses were formerly thrown upon such county, whereas they properly belonged to the county where he had been living. Strenuous objection to their payment was made by county commissioners, which would have been effectual in restricting such commitments to a minimum. Accordingly, this difficulty was overcome by the following amendment, embodied in section 1, chapter 475, Acts of 1905, and appearing in italics, viz.: —

All necessary expenses attending the apprehension, examination, trial or commitment of an alleged insane person shall, if the commitment is to a state insane hospital, county receptacle or the Boston insane hospital, be allowed and certified by the judge, and presented as often as once a year to the county commissioners, who shall examine and audit the same; and they shall then be paid by the county of which the alleged insane person is an inhabitant or, *if an inmate of any public institution for the insane, feeble-minded, epileptic, dipsomaniac or inebriate, of the state hospital or the state farm, be committed to any*

such institution, such expenses shall be paid by the county of which such inmate was last an inhabitant before his admission to the institution. If application is made for commitment to any other asylum, hospital or receptacle, the expenses shall be paid by the applicant or by a person in his behalf.

This was the first of a series of amendments (chapter 471, Acts of 1906 ; chapter 504, section 49, Acts of 1909) ending with chapter 420, Acts of 1910, which provides for the initial payment of all commitment expenses by the county in which the commitment is made, but for repayment, if necessary, by the county of which the committed person was an inhabitant at the time of his admission to the institution.

In the same year the scope of the voluntary admission law was broadened. Theretofore it applied only to those "whose mental condition is not such as to render it legal to grant a certificate of insanity in his case," whereas many such would be wholly competent mentally to decide such a matter. Furthermore, the original law made no provision for paying the board of a public charge, thus restricting its use to private patients, who constitute a relatively small percentage. These defects were remedied in the new law, chapter 432, Acts of 1905, as follows: —

The superintendent or keeper of any institution, public or private, to which an insane person may be committed, may receive and detain therein as a boarder and patient any person who is desirous of submitting himself to treatment, and who makes written application therefor and *whose mental condition is such as to render him competent to make such application.* Such person shall not be detained for more than three days after having given notice in writing of his intention or desire to leave such institution. *The charges for the support of such person in a public institution shall be governed by the provisions of law applicable to the support of an insane person in said institution, provided the approval of the state board of insanity shall be obtained in writing.*

The voluntary admissions during the past year to all institutions numbered 330, or 9.74 per cent. of all admissions from the community, of whom 264 were classed as insane, and would formerly have required commitment; to the McLean Hospital,

67, or 43.50 per cent. of its admissions; to the Westborough State Hospital, 84, or 15.73 per cent. of all its admissions. The use of the voluntary form of admission is steadily increasing, and may be properly used in very many more cases than at present.

The reception of voluntary patients was the first recognition of the principle of admitting to insane hospitals persons whose insanity had not been established by a medical certificate. The object was prevention of an attack of insanity.

The next step in this direction related to the need of provision for the observation of doubtful cases of insanity under conditions permitting their adequate study by experts. This need was first felt in the examination of persons under indictment for crime. At the suggestion of Dr. Henry R. Stedman, and through his efforts, aided by the Board, chapter 219 of the Revised Laws was so amended as to authorize the court to commit such person to an insane hospital for observation pending the determination of his insanity, as provided in chapter 257, Acts of 1904, viz.: —

If a person under indictment for any crime is at the time appointed for trial, or at any time prior thereto, found by the court to be insane, or *is found by two experts in insanity designated by the court to be in such mental condition that his committal to an insane hospital is necessary for the proper care or for the proper observation of such person, pending the determination of his insanity*, the court may cause him to be committed to a state insane hospital for such time and under such limitations as the court may order.

The extension of the principle of observation in an insane hospital, to determine the existence of insanity in doubtful cases other than criminal, was recommended in the Board's annual report for 1908 (p. 135), inasmuch as difficulty had been experienced in protecting the public against certain alleged insane persons who had manifested dangerous delusions and either evaded medical examination or concealed such delusions. Their apprehension was not authorized until a medical certificate of insanity had been filed with the committing judge. Both these needs were met in the revision of the insanity laws by chapter 504, Acts of 1909, viz.: —

SECTION 34. After hearing such evidence as he may consider sufficient, the judge may, either before or after the certificate required by section thirty has been filed, issue a warrant for the apprehension and bringing before him of the alleged insane person, if in his judgment the condition or conduct of such person renders it necessary or proper so to do. The warrant may be directed to and served by a qualified officer or by a private person named in the warrant; and pending examination and hearing, such order may be made relative to the care, custody or confinement of such alleged insane person as the judge shall see fit.

SECTION 43. If a person is found by two physicians qualified as provided in section thirty-two, to be in such mental condition that his commitment to a hospital for the insane is necessary for his proper care or observation, he may be committed by any of the judges mentioned in section twenty-nine to a state hospital for the insane or to the McLean Hospital, under such limitations as the judge may direct, pending the determination of his insanity.

The recommendations of the Board, made in 1908 (see p. 23), relative to the temporary care of mental patients and the application of the principles of the quarantine, have been carried out and broadened in the Acts of 1909 and 1911, viz.:—

SECTION 44, CHAPTER 504, ACTS OF 1909.

The superintendent of any state hospital for the care, treatment or observation of the insane and the McLean Hospital may receive for temporary care, not exceeding seven days, any person suffering from mental disease, on the written application of his natural or legal guardian or, if there be none, upon the written application of a chief or captain of police, any member of the district police, a selectman, the state board of charity or the state board of insanity, together with the certificate of a physician qualified as provided in section thirty-two, that such temporary care is necessary by reason of mental disease. The person applying for such an admission shall within seven days cause the patient to be committed, provided he does not sign a request to remain under the provisions of section forty-five, or to be removed from the hospital, and failing thereof shall be liable to the hospital for the expenses incurred and to a penalty of fifty dollars, which may be recovered by the hospital in an action of contract.

CHAPTER 395, ACTS OF 1911.

The superintendent or manager of any hospital for the insane, public or private, may, when requested by a physician, by a member of the board of health or a police officer of a city or town, by an agent

of the institutions registration department of the city of Boston, or by a member of the district police, receive and care for in such hospital as a patient, for a period not exceeding seven days, any person who needs immediate care and treatment because of mental derangement other than delirium tremens or drunkenness. Such request for admission of a patient shall be put in writing and filed at the hospital at the time of his reception, or within twenty-four hours thereafter, together with a statement in a form prescribed or approved by the state board of insanity, giving such information as said board may deem appropriate. Such patient who is deemed by the superintendent or manager not suitable for such care shall, upon the request of the superintendent or manager, be removed forthwith from the hospital by the person requesting his reception, and, if he is not so removed, such person shall be liable for all reasonable expenses incurred under the provisions of this act on account of the patient which may be recovered by the hospital in an action of contract. The superintendent or manager shall cause every such patient either to be examined by two physicians, qualified as provided in section thirty-two of chapter five hundred and four of the acts of the year nineteen hundred and nine, who shall cause application to be made for his admission or commitment to such hospital or, provided he does not sign a request to remain under the provisions of section forty-five of said chapter five hundred and four, to be removed therefrom before the expiration of said period of seven days. Reasonable expenses incurred for the examination of the patient and his transportation to the hospital shall be allowed, certified and paid as provided by section forty-nine of said chapter five hundred and four, as amended by chapter four hundred and twenty of the acts of the year nineteen hundred and ten, for the allowance, certification and payment of the expenses of examination and commitment.

CHAPTER 394, ACTS OF 1911.

No person suffering from insanity, mental derangement, deliriums, or mental confusion, except delirium tremens and drunkenness, shall, except in case of emergency, be placed or detained in a lockup, police station, city prison, house of detention, jail or other penal institution, or place for the detention of criminals. If, in case of emergency, any such person is so placed or detained, he shall forthwith be examined by a physician and shall be furnished suitable medical care and nursing and shall not be so detained for more than twelve hours. Any such person not so placed or detained who is arrested by or comes under the care or protection of the police, and any other such person who is in need of immediate care or treatment which cannot be provided without public expense, shall, except in the city of Boston, be cared for by the board of health of the city or town in which such

person may be. Such board of health shall cause such person to be examined by a physician as soon as possible, shall furnish him with suitable medical care and nursing, and shall cause him to be duly admitted or committed to an institution for the care and treatment of such persons, unless he should recover or be suitably provided for by his relatives or friends. Reasonable expenses for board, lodging, medical care, nursing, clothing and all other necessary expenses incurred by the board of health, under the provisions of this act, shall be allowed, certified and paid as provided by section forty-nine of chapter five hundred and four of the acts of the year nineteen hundred and nine, as amended by chapter four hundred and twenty of the acts of the year nineteen hundred and ten, for the allowance, certification and payment of the expenses of examination and commitment.

The city of Boston is partially excepted from the provisions of chapter 394, inasmuch as chapter 307, Acts of 1910, has particular reference thereto, and provides for the temporary care of its mental patients who come under the protection of the police. Its other mental patients may be admitted under this year's law to the Boston State Hospital, and to the Psychopathic Hospital on Fenwood Road when completed. The Boston Board of Health does not need to intervene because the Psychopathic Hospital will obviate the necessity of any delay in affording medical treatment to such patients.

It may appear at the first glance that the barriers have been swept away from entry to our insane hospitals by permitting voluntary, observation and temporary-care admissions without legal procedure. The results thus far point to the opposite effect. Last year there were 20 observation cases, of whom 10, or 50 per cent., were discharged without commitment; 156 temporary-care patients, of whom 44, or 28 per cent., were discharged within the seven days' limit. It is the expectation that the more careful study and fuller knowledge obtainable under these provisions of law will safeguard against unnecessary commitments.

However, there is need of taking every precaution against detention or even permissive residence in institutions of patients whose mental condition does not require hospital treatment. Without organized effort in this direction there might easily develop a tendency to accumulation of quiet, comfortable or helpful patients who have no friends to urge their discharge, are contented to remain, or need temporary assistance and super-

vision in gaining and maintaining their footing in the community.

Increasing attention has been paid to this matter. Recommendation was made by the Board in 1904 (see p. 25), and an act passed by the Legislature (chapter 435, Acts of 1905) which extended the period of temporary absences of patients from institutions from sixty days to six months, thus promoting early and more frequent discharge.

In the same year, upon recommendation of the Board, an act was passed by the Legislature (chapter 458, Acts of 1905) conferring upon the trustees of institutions the power, previously restricted to the Board, to place quiet and harmless patients at board in private families; and authorizing the Board to extend the leave of absence from boarding out from sixty days to one year, during which it may render assistance according to the need of the patient within a limit of \$3.25 a week.

A physician experienced in care of the insane has been employed since 1904 in the examination and selection, in conjunction with the hospital physicians, of suitable patients to leave the institutions and board in private families. As a result, a considerable number of patients have been taken home by their relatives, and such boarders have increased from 112, in 1898, to 275 at the present time.

This work could be better done and largely extended if the institutions would take it up, leaving its supervision to the Board. It should be a part of the organization for social service recommended on pp. 24-26. The expense of carrying it on and of the board of patients should be met by an annual appropriation separate from maintenance of the institution. A trained social worker should be put in charge, with such assistance as might gradually become necessary. Activity in this direction would materially reduce the accumulation of the insane in institutions, which results chiefly from a diminishing discharge rate.

The methods of supervision are well illustrated by the development of the financial department, described on pages 186-200.

THE COMPARATIVE COST RATE

during this period appears in the following analysis of all expenditures for all purposes by the institutions during the decennial period *preceding* and during that *succeeding* Oct. 1, 1898.

Certain essential differences of conditions and methods prevailing during the two periods should receive consideration. In the first, there was great business depression with low cost of labor, material and supplies, whereas in the second, the opposite conditions prevailed to an extreme degree. Ten per cent. increase of cost for an equal amount of work during the second period would be a low estimate of the difference of market conditions.

The daily average number of patients under treatment was 5,223 during the first decennium and 9,322 during the second decennium. Overcrowding was excessive during the former because new provision was made irregularly, and only in response to the most urgent demand for relief, resulting in constant and extreme crowding of patients; whereas during the second decennium systematic building nearly commensurate with the increase of patients reduced it materially. It is estimated, after careful comparison of records, that the percentage of overcrowding was at least 5.46 per cent. greater during the first period. Overcrowding affects expenditures in two ways. It diminishes the number of new beds to be provided and the relative cost of maintenance of the *excess* of patients. Specifically, equality of conditions of overcrowding during the two periods would have added \$446,000 to the expenditures of the first period, or 15 cents a week per capita, reckoning the average cost of provision of a new bed at \$1,000, and a reduction of one-third in the cost of maintenance of the excess of patients crowded into old wards instead of new quarters.

During the first period the average weekly per capita expenditure for all purposes, inclusive of maintenance, upkeep, land, buildings, improvements, furnishing and equipping, was \$4.30 (which is raised to \$4.73 by adding 10 per cent. to equalize market conditions). The corresponding average weekly per capita during the second period was \$4.68.

The expenditures of the first decennium having been corrected

for differences in market conditions and overcrowding, its weekly per capita rate was \$4.88, against \$4.68 during the second decennium, being a decrease of 20 cents a week per capita during the latter period.

It is, therefore, fair to affirm that the relative cost rate of the work done during the period under review was less than the previous rate, although standards were raised, hours of duty of nurses reduced 22 per cent., their wages much increased, generous provision made for nurses and employees' homes, large acreage of land acquired for colony development, methods of treatment improved and scientific research encouraged.

RECOMMENDATIONS FOR LEGISLATION.

The product of the industries for the occupation of patients exceeds in some cases the consumption of the institution, so that it would be desirable to sell the excess to other institutions. In order that the receipts from such sales may be applied to maintaining such industries, which otherwise would be an unjust charge upon the maintenance funds of the institution, the Board recommends legislation embodied in the following draft of a bill, which is submitted in compliance with section 6, chapter 18 of the Revised Laws, as amended by chapter 452 of the Acts of 1910: —

AN ACT RELATIVE TO RECEIPTS FROM THE LABOR OF INMATES OF THE INSTITUTIONS UNDER THE SUPERVISION OF THE STATE BOARD OF INSANITY.

Be it enacted, etc., as follows:

SECTION 1. The receipts from the labor of inmates of the state institutions under the supervision of the state board of insanity shall be paid into the treasury of the commonwealth monthly, and so much thereof as is necessary to pay the expense of maintaining the industries for the occupation of inmates of said institutions shall be expended therefrom for that purpose; but not until schedules of such expenses have been sworn to by the superintendent and approved by the trustees. Receipts from any one of said institutions shall be applied to paying the bills of that institution only.

SECTION 2. This act shall take effect upon its passage.

Occasionally there is considerable delay in the reception of an insane person at the hospital to which he has been committed.

Although no adverse consequences of such delay are known to the Board, there is such a possibility under the existing law, which does not limit the time, after the date of the order of commitment, within which such person may be conveyed to the hospital.

The Board therefore recommends the legislation embodied in the following draft of a bill to establish such a limit:—

AN ACT RELATIVE TO THE ORDER OF COMMITMENT OF AN INSANE PERSON.

Be it enacted, etc., as follows:

An order of commitment of a person to a hospital or receptacle for the insane, public or private, shall be void if such person shall not be received at the hospital or receptacle to which he shall be committed by such order of commitment within ten days after the date thereof.

The legal requirements in the commitment of an insane person often necessitate serious delay in affording him medical care and nursing at a time when his mental disease may have reached a critical stage. About one-third of all the insane in this State are sent to police stations and like places, and detained sometimes several days, pending the proceedings necessary for their commitment to a hospital. Aside from the objectionable associations in such places, there can be no adequate provision therein for their medical treatment and nursing for any length of time. Furthermore, it is now generally recognized that insanity is a disease, and should be treated like other forms of disease. It is oftentimes a source of danger to the individual or to the community, and therefore comes into the category of diseases dangerous to the public welfare. It is therefore proper and desirable that it should be brought within the jurisdiction of boards of health.

The Board therefore recommends legislation embodied in the following drafts of bills:—

AN ACT RELATIVE TO THE CARE OF PERSONS SUFFERING FROM CERTAIN MENTAL DISORDERS PENDING THEIR ADMISSION OR COMMITMENT TO APPROPRIATE INSTITUTIONS.

Be it enacted, etc., as follows:

No person suffering from insanity or mental derangement, delirium tremens or other form of delirium, or mental confusion, except drunkenness, shall, pending examination, admission or commitment to an institution for the care and treatment of such persons, except in case of emergency, be placed or detained in a lockup, police station, city prison,

house of detention, jail or other penal institution, or place for the detention of criminals. If, in case of emergency, such a person is so placed or detained, he shall forthwith be examined by a physician and shall be furnished suitable medical care and nursing, and shall not be so detained for more than twelve hours. Any such person who is arrested by or comes under the care or protection of the police, or any other such person who is in need of immediate care and treatment which cannot be provided without public expense, shall, except in the city of Boston, be cared for by the board of health of the city or town in which such person may be. Such board of health shall cause such person to be examined by a physician as soon as possible, shall furnish him suitable medical care and nursing, and shall cause him to be duly admitted or committed to an institution for the care and treatment of such persons, or otherwise suitably provided for. Reasonable expenses for board, lodging, medical care, nursing, clothing and all other necessary expenses incurred by the board of health, under the provisions of this act, shall be paid by the city or town in which such person may be, and may be recovered by it from such person, if of sufficient ability, or from the persons or kindred bound by law to maintain him; otherwise, from the city or town in which he has a legal settlement. If he has no settlement, such city or town shall be reimbursed by the commonwealth after the bills for such expenses have been approved by the state board of charity.

AN ACT RELATIVE TO THE RECEPTION AND TEMPORARY CARE IN CERTAIN
INSTITUTIONS OF PERSONS SUFFERING FROM MENTAL DERANGEMENT.

Be it enacted, etc., as follows:

The superintendent or manager of any hospital for the insane, public or private, may, if no objection is made thereto, when requested by a physician, by a police officer of a city or town or by a member of the district police, send for, receive and care for in such hospital as a patient, for a period not exceeding seven days, any person who needs immediate care and treatment because of mental derangement other than delirium tremens and drunkenness. If such person is received at the request of a physician, such physician shall, upon request of such superintendent or manager, remove such patient from the hospital, and, if he does not so remove him, shall be liable for the expenses incurred for transportation to such hospital and all other expenses incurred under the provisions of this act which may be recovered by the hospital in an action of contract. Such superintendent or manager shall cause each such patient to be examined by two physicians qualified as provided in section thirty-two of chapter five hundred and four of the acts of the year nineteen hundred and nine who shall cause an application to be made for the admission or commitment of such person to such hospital, and shall make the certificate required by section thirty of said chapter five hundred and four, or shall cause such person to be removed from such hospital before the ex-

piration of said period of seven days. Reasonable expenses incurred for the transportation of a person to the hospital and all other necessary expenses incurred under the provisions of this act shall be allowed, certified and paid as provided by section forty-nine of said chapter five hundred and four, as amended by chapter four hundred and twenty of the acts of the year nineteen hundred and ten, for the allowance, certification and payment of the expenses of examination and commitment.

ESTIMATES OF STATE EXPENSES FOR 1911

on account of the insane, feeble-minded, epileptic and inebriates in Foxborough State Hospital amount to \$3,297,260.89, excluding estimates for maintenance of the insane department of the State Infirmary and the Bridgewater State Hospital, whose estimates are inseparable from those of the institutions as a whole, which are supervised by the State Board of Charity. They comprise estimates by the State Board and by the State Institutions.

ESTIMATES BY THE STATE BOARD.

For travelling, office and contingent expenses, including the printing and binding of the annual report,	\$8,000
This estimate is the same as the appropriation of the previous year.	
For salaries of officers and employees,	39,000
The increase in the estimate for salaries is necessary because of a greater amount of work and the regular salary advances based on length of service.	
For transportation and medical examination of State charges under the supervision of the Board,	11,500
This estimate is the same as the appropriation of the previous year.	
For the support of State charges boarded out in families, under the supervision of the Board, or temporarily absent under authority of the same,	41,000
The increase in the estimate for the support of State charges boarded out in families, etc., is due to a moderate increase in the board rate and an increase of patients.	
For the support of State charges in the Hospital Cottages for Children,	12,500
The increase in the estimate for the support of State charges in the Hospital Cottages is due to an increase of patients.	

For investigation as to the nature, causes, results and treatment of mental disease and defect and the publication of the results thereof, \$2,500

The appropriation for investigating the nature, causes, results and treatment of mental disease, etc., is required to carry out the provisions of section 6, chapter 504, Acts of 1909.

The following special appropriation is needed for: —

Payment for land taken by eminent domain for the use of the Boston State Hospital, under authority of chapter 535 of the Acts of the Legislature of 1909, and for other expenses necessarily incurred in carrying out the provisions of said chapter, 250,000

ESTIMATES BY STATE INSTITUTIONS

relate (1) to maintenance expenses, inclusive of repairs and improvements, and (2) special expenditures for new buildings, additions, new furnishings and equipment, in the main.

Estimates for Maintenance Expenses

of the State institutions have been considered by the Board, as required by section 5, chapter 504, Acts of 1909, and are approved according to the following classification: —

Comparative Estimates for Maintenance during the Fiscal Year 1911.

	AVERAGE NUMBER OF PATIENTS.		Salaries, Wages and Labor.	Food.	Clothing.	Furnishings.	Heat, Light and Power.	Repairs and Improvements.	Farm, Stable and Grounds.	Miscellaneous.	Totals.
	1910.	1911 (estimated).									
Worcester Hospital,	1,368	1,375	\$110,000 00	\$80,000 00	\$14,000 00	\$12,000 00	\$26,000 00	\$18,000 00	\$21,000 00	\$22,000 00	\$303,000 00
Taunton Hospital,	971	994	100,000 00	60,000 00	5,000 00	11,000 00	17,000 00	7,000 00	15,000 00	20,600 00	236,600 00
Northampton Hospital,	847	883	67,500 00	52,500 00	5,000 00	6,500 00	12,500 00	8,500 00	16,500 00	11,000 00	180,000 00
Danvers Hospital,	1,427	1,464	144,700 00	77,000 00	15,000 00	17,000 00	25,000 00	32,500 00	25,500 00	22,000 00	358,700 00
Westborough Hospital,	1,638	1,119	125,500 00	66,000 00	7,500 00	12,000 00	28,000 00	16,000 00	17,000 00	17,000 00	289,000 00
Boston Hospital,	828	846	104,000 00	45,500 00	7,300 00	13,000 00	15,800 00	9,000 00	12,000 00	15,000 00	221,600 00
Worcester Asylum,	1,122	1,136	108,000 00	61,000 00	13,000 00	10,500 00	25,500 00	12,000 00	16,000 00	12,000 00	238,000 00
Medfield Asylum,	1,656	1,740	143,710 00	91,240 00	17,000 00	8,290 00	29,000 00	14,000 00	20,500 00	11,500 00	335,240 00
Gardner Colony,	610	660	45,500 00	25,000 00	6,500 00	6,000 00	11,000 00	10,000 00	14,000 00	8,000 00	126,000 00
Monson Hospital,	744	825	79,300 00	43,500 00	4,000 00	5,300 00	18,500 00	9,100 00	11,500 00	13,000 00	184,200 00
Foxborough Hospital,	325	328	37,500 00	21,000 00	2,300 00	2,300 00	8,500 00	7,000 00	6,200 00	10,000 00	94,800 00
School for the Feeble-minded at Waltham School,	1,342	1,390	108,000 00	66,000 00	16,000 00	11,000 00	16,000 00	19,000 00	23,000 00	17,820 89 ¹	276,820 89
Wrentham School,	141	275	27,350 00	16,450 00	3,000 00	3,000 00	5,000 00	3,500 00	6,000 00	4,500 00	68,800 00
Total,	12,419	13,035	\$1,201,060 00	\$705,190 00	\$116,600 00	\$117,890 00	\$237,800 00	\$165,600 00	\$204,200 00	\$184,420 89	\$2,932,760 89
Expenses, 1910,	-	-	\$1,120,748 67	\$665,714 93	\$111,507 30	\$119,988 26	\$211,525 36	\$159,090 26	\$301,488 72	\$183,550 74	\$2,773,614 24
Increase in estimates for 1911,	-	-	\$80,311 33	\$89,475 07	\$5,092 70	\$2,098 26 ²	\$26,274 64	\$6,509 74	\$2,711 28	\$870 15	\$159,146 65
Receipts in Treasury December 1,	-	-	-	-	-	-	-	-	-	-	\$399,432 03
Total to be appropriated in addition to receipts,	-	-	-	-	-	-	-	-	-	-	\$2,533,828 86

¹ Includes sewage disposal.² Decrease.

It thus appears that the estimates for maintenance of State institutions under the supervision of the Board, exclusive of State Infirmary and the Bridgewater State Hospital, amount to \$2,932,760.89, compared with \$2,773,614.24 expended in 1910, — an increase of \$159,146.65, or 5.74 per cent.

The average number of inmates in these institutions next year is estimated to be 13,035, compared with 12,419 the past year, — an increase of 616, or 4.95 per cent.

The increase in this year's estimates is largely due to the increase in the number of inmates to be cared for. The estimates for salaries, wages and labor call for an increase of \$80,311.33, or 50.46 per cent. of the total increase of maintenance expenses. The estimates for food call for an increase of \$39,475.07, or 24.80 per cent. of the total increase of maintenance expenses. These two items account for 75.26 per cent. of the total increase of maintenance expenses.

The Insane in State Institutions

Oct. 1, 1910, numbered 11,979. Their increase for the year was 489, against 499 last year; 465, the average annual increase for the last five years; 397, the last ten years; and 333, the last twenty-five years.

The institutions are overcrowded in the aggregate to the number of 814. This overcrowding will gradually be relieved during the next year by the occupancy of 928 beds which are now under construction. In the interval, however, there will be an increase in accumulation amounting to at least one year's average increase, which, as above stated, amounts to approximately 500.

Plans and specifications have been prepared by the trustees of the different institutions which will provide for 409 patients, 84 nurses and 27 employees. There is urgent need that appropriations be granted according to these estimates as approved by the State Board.

The Feeble-minded and Epileptic

in State institutions Oct. 1, 1910, numbered 1,981, an increase of 171 for the year, against 141 last year, and 143, the average annual increase for the last five years.

There are many feeble-minded children waiting for admission to the schools at Waverley and Wrentham, who are urgently in

need of such care. Plans and specifications have been presented by the trustees of these institutions for buildings which will accommodate 168 children and 21 nurses. Both these institutions are crowded to the utmost, so that additional children cannot be received unless such accommodation is provided.

Estimates for Special Appropriations

as requested by the trustees of the different institutions, have been considered by the Board, as required by section 5, chapter 504, Acts of 1909, and appear in the following classification according to institutions, with an expression of the Board's opinion as to the necessity or expediency of granting appropriations according thereto: —

Worcester State Hospital.

Constructing and furnishing an addition to the main building to accommodate 100 male patients, with open-air ward on the roof for tubercular patients, and to provide dining rooms on the lower floor for 125 patients and 80 attendants, thus vacating three ward dining rooms to be used as dormitories for 32 additional patients,	\$84,000
Alterations and repairs necessary in raising the roof of the Salisbury ward, thereby providing for 21 male patients,	10,000
The erection of two passenger elevators, one to convey patients to the roof of the new female ward recently completed, and the other to the roof of the proposed four-story addition to the main building on the male side,	4,200
Purchase of land,	18,000
	<hr/> \$116,200

The above estimates are approved by the State Board.

The above addition to the main building would provide the same facilities for the classification and treatment of male patients of the disturbed class as has already been furnished for the same class of female patients. It would afford provision for the isolation and open-air treatment of tubercular male patients. It would furnish a separate dining room for male attendants, who now take their meals in the ward dining rooms with patients. The additional large dining room for male patients would vacate three ward dining rooms, which are now very much overcrowded and in very unsatisfactory condition, for use as dormitories for 32 patients.

If this addition should be made and the roof of the Salisbury ward raised, provision for 153 patients would be made at a total cost of \$94,000, or \$614 per capita, which is a reasonable expense for the accommodation of this class of patients.

The purchase of the land above referred to is very important. It borders land owned by the State, and lies close up to the present buildings. If it should be occupied by private dwellings, their nearness to the hospital would occasion serious complaint by the public, and impair the usefulness of the institution.

Northampton State Hospital.

Addition and alterations in bakery, erection of new ovens and other equipment,	\$6,500
Constructing and equipping a laundry building,	40,425
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	\$46,925

The above estimates are approved by the State Board.

Westborough State Hospital.

Constructing a veranda on the Codman building,	\$2,250
Constructing two additional sewage beds,	1,980
Purchase of Collins farm,	4,250
	<hr/>
	\$8,480

The above estimates are approved by the State Board.

In addition, the trustees request an appropriation of \$20,000 for reconstructing and enlarging the infirmary cottage. The State Board agrees with the trustees that this building should be thoroughly renovated and enlarged, to provide adequate lavatory, toilet and bathing facilities. It believes, however, that the plan presented can be improved and the cost of the work reduced. It therefore recommends deferring this work for further study.

Boston State Hospital.

Addition to electric light and power plant,	\$13,875
Constructing, furnishing and equipping building for supplies, cold storage and bakery,	42,000
Alterations and repairs in south dormitory of the men's department,	6,000

Constructing and furnishing a house for 34 male nurses, . . .	\$22,000
Constructing and furnishing a group of three buildings for patients working on the farm, comprising a central building sufficient to accommodate 19 employees and to provide dining rooms and general service for a completed group for 260 patients, two dormitories accommodating together 104 male patients, with low-pressure heating plant for each building, . . .	84,000
	<hr/>
	\$167,875

The above estimates are approved by the State Board.

The State Board is in agreement with the trustees on all the above items except the fifth, relative to a group of farm buildings. The trustees have presented plans and specifications calling for an appropriation of \$83,000 for constructing and furnishing a group of buildings of the same general character as described above, but with the following differences:—

(1) A separate high-pressure steam heating plant is proposed by the trustees, which would require constant attendance of licensed firemen and engineers, at a considerable increase in cost of maintenance over that of low-pressure boilers in fireproof chambers in connection with each building, and also greater initial expenditure. Eventually a central heating plant must be established for the whole institution, to which this group of buildings should be connected. In anticipation of this, it seems to the State Board better to heat each building separately on a low-pressure system until the time when the central heating plant shall be available.

(2) It is desirable that this class of patients should be provided for in relatively small buildings, and at the lowest cost. The trustees intended, therefore, to use plaster construction in the small dormitories, expecting that the cost would not much exceed that of wooden construction. The estimates, however, show so near an approximation to substantial brick construction that doubt arose as to the advisability of using plaster construction. The State Board has obtained comparative estimates of the cost of plaster construction and sand-struck brick construction, and finds that the latter would cost only about 10 per cent. more than the former. It therefore recommends that brick construction be substituted for plaster construction. Furthermore, if brick is used, each dormitory can be enlarged to provide for 12 additional patients, or 24 additional patients in the two dormitories. The State

Board has obtained estimates showing that such enlargement of the two dormitories can be made at a cost of about \$5,000. At the suggestion of the State Board, the trustees have made the above modifications and obtained estimates which show that the group of buildings can be constructed and furnished for \$84,000.

The State Board, therefore, recommends that brick be substituted for plaster construction, that the two dormitories be enlarged to accommodate 24 additional patients, and that the high-pressure heating plant be replaced by low-pressure boilers for each building.

Worcester State Asylum.

Constructing and furnishing a house for 50 female nurses,	\$29,300
Constructing and furnishing two buildings for 50 patients each,	40,000
Constructing storehouse,	17,100
Purchase and installation of boiler,	2,000
Hydrotherapeutic apparatus,	2,400
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	\$90,800

The above estimates are approved by the State Board.

Gardner State Colony.

Constructing and furnishing a house for 30 male patients, and providing water supply therefor,	\$11,600
Constructing and furnishing employees' house,	5,000
Extension of coal trestle,	1,200
Extension of water system,	3,600
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	\$21,400

The above estimates are approved by the State Board.

Monson State Hospital.

Alterations in machine shop and storehouse for fireproofing and refrigeration purposes,	\$3,000
Constructing and furnishing an addition to the dining-room building, and alterations in the present building,	25,000
Constructing and equipping an addition to the laundry,	15,000
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	\$43,000

The above estimates are approved by the State Board.

The estimates for the above work, based upon the plans and specifications as submitted to the Board, exceed the above esti-

mates which the trustees present. The Board understands that the trustees propose to omit certain parts of the work, and to bring the requirements within the above estimates.

Bridgewater State Hospital.

The trustees of the State Farm, of which the Bridgewater State Hospital for the insane is a minor part, present a general proposition calling for an appropriation of \$50,000 for acquiring certain dwelling houses and land in the immediate vicinity of the institution, and for constructing new dwellings for the accommodation of officers and employees and their families.

The trustees believe that such provision will increase the stability and elevate the standard of service in the institution, and greatly increase its efficiency. This Board agrees with the main purpose of this proposition, and desires to emphasize the necessity of encouraging every effort which has for its object the improvement of the living conditions of nurses and employees, particularly with reference to providing modest houses which will attract married men of mature years, in view of the fact that on the average the whole corps of officers and employees in all our institutions changes oftener than once in six months, creating a situation in general which is neither economical nor conducive to efficient administration.

This particular proposition, however, relates chiefly to the main institution, and no definite proposition relating to the insane has been submitted in detail to the Board for its consideration. Hitherto it has been its policy to regard such a matter as outside its field of supervision and coming within that of the State Board of Charity, which supervises the main part of the institution. The subject comes before the Board for consideration at so late a date that it has not had opportunity to make sufficient investigation, and is not prepared to express an opinion as to the merits of this particular plan.

Massachusetts School for the Feeble-minded.

Constructing an addition to nurses' home, to provide for 21	
additional nurses,	\$18,343
Constructing a hospital for 63 male patients,	43,345
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	\$61,688

The above estimates are approved by the State Board.

Wrentham State School.

Constructing and furnishing a building to accommodate 105 children,	\$50,000
Constructing and furnishing a house to accommodate 22 employees,	12,500
Constructing and furnishing a schoolhouse and assembly hall,	42,000
Remodelling the Hurley house,	1,500
Constructing a carriage and tool house,	1,600
Furnishing and equipping school and industrial rooms,	1,500
Sewage disposal system,	13,000
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	\$122,100

The above estimates are approved by the State Board.

Taunton Hospital, Danvers Hospital, Medfield Asylum, State Infirmary and Foxborough Hospital have made no requests for special appropriations for the insane this year.

SUMMARY OF RECOMMENDATIONS FOR SPECIAL APPROPRIATIONS.

Insane.

Constructing, furnishing and equipping buildings for patients and nurses,	\$286,900
Number of patients provided for,	409
Average per capita cost,	\$576 28
Number of nurses provided for,	84
Average per capita cost,	\$610 71
Patients and nurses provided for,	493
Average per capita cost,	\$581 95
Land, buildings for officers and employees and for administrative purposes, including furnishing and equipment, improvements and repairs,	186,280
	<hr/>
Total,	\$473,180

Feeble-minded.

Constructing, furnishing and equipping buildings for patients and nurses,	\$111,688
Number of patients provided for,	168
Average per capita cost,	\$555 62
Number of nurses provided for,	21
Average per capita cost,	\$873 48
Patients and nurses provided for,	189
Average per capita cost,	\$590 94

Feeble-minded — Concluded.

Land, buildings for officers and employees and for administrative purposes, including fur- nishing and equipment, improvements and repairs,	\$72,100
Total,	\$183,788

Epileptic.

Land, buildings for officers and employees and for administrative purposes, including fur- nishing and equipment, improvements and repairs,	\$21,500
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All Classes.

Constructing, furnishing and equipping build- ings for patients and nurses,	\$398,588
Number of patients provided for,	577
Average per capita cost,	\$570 09
Number of nurses provided for,	105
Average per capita cost,	\$663 27
Patients and nurses provided for,	682
Average per capita cost,	\$584 44
Land, buildings for officers and employees and for administrative purposes, including fur- nishing and equipment, improvements and repairs,	279,880
Total,	\$678,468

REVIEW OF THE YEAR.

REPORT OF THE PATHOLOGIST.

To the State Board of Insanity.

As pathologist to the Board of Insanity, I wish to present hereby a report of work from Dec. 1, 1909, to Nov. 30, 1910, being my second report and the first to cover a full year's work.

The duties of the pathologist to the Board, as defined by the terms of my appointment, May 1, 1909, consist of (1) supervision of the clinical, pathological and research work in the various institutions under the Board's general supervision; (2) visits to the institutions from time to time; and (3) reports to the Board, comprising conditions observed and such recommendations as result therefrom.

Although in a broad sense supervisor of the psychiatric and hygienic work of the institutions, the pathologist to the Board derives all his powers from the Board, and has the right of investigation but no direct control of the medical work of the institutions.

The observations and recommendations of this report are based upon 47 visits to the various institutions, and upon numerous conferences with members of the several medical staffs. The visits are often overnight visits and occasionally longer, permitting personal interviews and relations which routine "inspections" could never afford. The courtesy and increasing interest of the institutional officers have greatly facilitated my work.

THE PATHOLOGICAL WORK OF THE INSTITUTIONS

will be reviewed by means of excerpts from their annual reports. That pathology is more than pathological anatomy, and that the pathologist in each institution must be more than a maker of autopsies, is increasingly shown by these reports, which describe work by the pathologists not only in the anatomy of the dead, but in clinical pathology, in clinical diagnosis and classification, in theoretical psychiatry, in chemical and serum pathology, in heredity, and (last, but not least) in practical institutional hygiene. Another encouraging sign is that not only have the pathologists treated pathology as embracing *both structure and function*, but in several of the institutions co-operative work between the pathologists and the ward physicians has become the rule. The work of ward and laboratory no longer flows in two independent streams.

Worcester State Hospital Laboratory.

Hygienic Work.—During the summer months the hospital was visited by an epidemic of dysentery, and an investigation was begun by the pathologist, with the assistance of Mr. W. L. Dodd, a student of the Massachusetts College of Pharmacy, who was at work in the laboratory during August and September as a volunteer, through the courtesy of the superintendent.

The investigation revealed that the epidemic was a dysentery of bacillary origin,—due to the *Bacillus dysenteriae*, Shiga type,—and further experiments were undertaken to yield evidence, if possible, of the method of transference of the infection from case to case. The house fly has been held accountable for much such transmission, and naturally was under suspicion here. To obtain definite experimental data concerning the transportation of bacteria by flies, a culture was obtained of a harmless organism which is not native here, but which, by means of its pigment production, is easily recognizable on cultivation,—

B. prodigiosus. Broth cultures of this bacillus were exposed in a part of the hospital which was thickly infested with flies, and sterile wire traps, baited with sterile sugar syrup, were set in five ward dining rooms and in the scullery room of the kitchen. The flies caught in the traps were taken to the laboratory daily and allowed access to a plate of solid culture medium, which was examined after twenty-four and forty-eight hours for colonies of *B. prodigiosus*.

Within the six days of the experiment the test organism was recovered from flies caught in every one of the six places where traps were set, in spite of the fact that five of them were in ward dining rooms which are completely screened.

These results serve to indicate the enormous activity of flies in carrying organisms where the supply of flies is abundant and the organisms available in quantities, and also suggest the inefficiency of screens as a means of defense.

The hospital is so situated in its grounds and with reference to the surrounding community as to make it probable that the majority, at least, of the swarms of flies about the buildings in season is home grown. With this idea in view a survey of the grounds revealed a number of badly infested breeding places for flies, and it is anticipated that care of these plague spots throughout another season will result in at least a very marked diminution of the numbers of the flies, and consequently in the danger of other similar epidemic outbreaks.

The new standards set by the above-mentioned helpful and practical work have involved special new equipment (autoclave, sterilizer, special glassware, electric centrifuge). These new pieces of apparatus, together with the microtomes, photomicrographic apparatus and specially fitted apparatus used in routine laboratory work, make the laboratory built in 1905 a model one in most respects and scarcely excelled, so far as the writer is aware, in any other State hospital in this country, considering the scope of its work. Should the future demand more chemical and clinicophysiological work, there is ample space for the installation of the proper apparatus.

The important work, hitherto largely neglected in this country, of investigating the *nervous conditions of imbecility and idiocy* has been begun by Orton on comprehensive lines. Some of the work will have been published by the date of issuance of this report. The work has important bearings on the classification of defectives and the principles underlying their education.

The need of co-operation among the institutions is emphasized again by Orton as follows:--

Co-operative Work in Institutions.—The pathologist to the State Board of Insanity has issued a circular letter to those State hospitals which support laboratories aiming at a co-operative interchange of material. Thus, if the pathologist of one hospital is making intensive studies of one type of psychosis he can put material from such a case to better use than would be afforded in another laboratory where the pathologist is busy with material of another class. A movement is now under consideration looking toward an occasional meeting of the pathologists from all the State hospitals for the purpose of discussing their various lines of work and better correlating their endeavors. This laboratory is in entire accord with Dr. Southard's suggestion, and is ready to turn over material of value for special study to those laboratories enabled to make use of it.

The pathologist here is preparing for an intensive study from the stratigraphic aspect of the brains of imbeciles and defectives, and for purposes of control of the brains of normal children and fœtuses, and would, therefore, probably cover more thoroughly the brains of such cases than would be done in the routine examination in the laboratory of a sister institution where the more complete examinations may be, for instance, reserved for cases of epilepsy; and so would be glad to turn over material of the latter sort to an investigator who would find it of more value than would obtain here. This laboratory is also anxious to obtain the brains from cases of long-standing amputation of a limb or loss of an eye, etc., for the study of cortical cell changes by the serial method.

Routine Work.—Jan. 1 to Oct. 1, 1910, 70 autopsies (52+ per cent. of the deaths). In all cases a complete microscopic examination of the trunk organs is made. The brains were treated by two different methods. Those showing organic changes fitting them for examination by the total section process, and those warranting exhaustive special study, were preserved *in toto* in formalin. The remainder were examined by a routine procedure which embraces the microscopic study of sections from seventeen different areas, each in three different fixatives, for the display, respectively, of the cells, fibers and neuroglia.

This amount of routine technique, in addition to the record keeping, entails a large amount of technical and clerical work. The laboratory enjoys the services of a clerical assistant who takes care of the stenographic and some of the technical work. The hospital pharmacist, who is a skilled microtommist, is at work during the afternoons at the laboratory. The members of the staff take part in the performance of the autopsies, both in the actual sections and in the record taking.

Scientific Results.—(1) A convincing demonstration of the *transmission of bacteria by flies* in the hospital grounds (see above); (2) a demonstration of novel facts concerning important *fine*

changes in the nervous system in certain acute psychoses (Satellitosis in dementia præcox and manic-depressive insanity, — New England Society of Psychiatry); (3) demonstration of special changes and *defects in the cerebrum of certain imbeciles* (some work in press and program outlined).

Danvers State Hospital Laboratory.

Hygienic Work. — During the first three months of the year 1910 there was an epidemic of diphtheria at the hospital. This epidemic was characterized by the small number and mildness of the acute cases, coincident with the wide distribution of the diphtheria bacillus throughout the hospital. Out of a hospital population of approximately 1,700, the diphtheria bacillus was isolated in 666 individuals. Only 19 of these were acutely ill with the disease, 4 of which cases were severe, and of these, 2 ended fatally. The organism was isolated at autopsy six times in all, twice from fatal cases of diphtheria, four times from cases that had died from other diseases.

The hospital was quarantined by the board of health from February 5 to April 4. During this time no visitors were allowed from the outside, and no one was allowed to leave the hospital who had not complied with the rules of the quarantine, which prescribed a negative throat culture, a full antiseptic bath, including disinfection of the hair, and complete change of clothing. These rules were rigidly enforced, and apparently were effective in preventing the spread of the disease from the hospital.

Within the hospital an exhaustive campaign was conducted, with the purpose of locating sources of infection and preventing contagion from the same, curing such cases as developed, and protecting the unaffected from the disease. This work, therefore, naturally fell into three general subdivisions: the clinical and bacteriological demonstration of the Klebs-Loeffler bacillus, the disinfection of the food supply, rooms, furniture, etc., and the administration of the antitoxin serum as a curative and prophylactic measure.

The bacteriological investigation consisted in the examination of cultures on Loeffler serum medium. In all, 6,340 cultures were taken. Of these, 1,210 showed the presence of the Klebs-Loeffler bacillus morphologically. The cultures were distributed as follows: —

627 from male patients, of which 223 were positive.

599 from female patients, of which 316 were positive.

285 from officers and employees, of which 127 were positive.

The positive cultures were distributed as follows: —

TIMES TAKEN.	Male Patients.	Female Patients.	Officers and Employees.
1,	190	130	37
2 to 5,	67	145	32
5 or more,	14	24	2
10 or more,	3	5	1

The examination of uncooked food, such as milk and butter, failed to reveal the presence of the diphtheria bacillus. When positive cultures appeared, the locality where they appeared was isolated. In the wards, where single cases appeared, these were removed to special observation wards, and throat cultures from the entire ward were taken at intervals of a few days, until the entire ward had yielded two consecutive negative cultures. In the isolation wards throat cultures were taken at frequent intervals, and the patients were released and returned to their original ward after two consecutive negative cultures had been obtained at intervals of two days. As there were in all only 19 cases that were acutely ill with the disease, it was possible to isolate these individually, and in no case was there a spread of the disease from any one of these.

Disinfection was carried on systematically, ward by ward and building by building, so that the entire hospital, from attic to cellar, including the laundry, barn and other outbuildings, was thoroughly disinfected at least once, and several times wherever cases of positive cultures were discovered. The disinfection consisted in sealing rooms, filling them with moist formalin vapor, and leaving them thus for twenty-four hours. Ward aisles, corridors, attics and other places that could not be properly sealed were repeatedly sprayed with 4 per cent. formalin, 3 per cent. lysol, or sulpho-naphthol. The rules for the disinfection of individuals, as the spraying of throats three times a day with Dobell's solution, gargling every two hours with boric acid solution and thorough disinfection by live steam of dishes, bedding, clothing, etc., were rigidly carried out.

In addition to disinfection and isolation, antitoxin was administered as a routine throughout the hospital.

The question of the origin of such epidemics as this in insane hospitals is a very difficult one to answer, since it is impossible to control the introduction of disease germs such as the diphtheria bacillus, or to demonstrate its presence unless it causes disease. In the present instance one source of infection can be traced undoubtedly to a slight epidemic of 5 cases in August, 1909, in which the germ was introduced by an employee who developed the symptoms shortly after assuming his duties at the hospital.

But this alone would not account for the conditions found, and it would appear, from such information as we have been able to obtain,

that throat infections with a bacillus morphologically identical with the Klebs-Loeffler, but with very rare acute manifestations, was not confined to the hospital.

The disease evidently spread by direct contact from one individual to another, by means of dishes, clothing, etc., and also, as was culturally demonstrated in the laboratory, by rats, roaches, etc.

Dr. H. W. Mitchell, superintendent, speaks specifically of "The Interdependence of the Laboratory and Clinical Work," as shown by Adler's report.

Pathologist's Report.—During the year 1909-10 the routine pathological work included 88 post-mortem examinations, which is 42.7 per cent. of the total number of deaths during the same period. In each case autopsied, specimens from the tissues are preserved in formalin and zenker, the usual microscopic technique carried out, after which they are placed on file in the various collections. Cultures from heart's blood and cerebro-spinal fluid are made in each case, and, in selected cases, from lymph nodes, spleen and gall bladder. The brains are preserved *in toto* in formalin, after specimens have been taken in special cases for Nissl stains, and are being prepared for sectioning on the large brain microtome.

The clinical laboratory work included 589 urine analyses; 36 sputum examinations for tubercle bacilli, of which 12 were positive; 26 blood counts; 5 gastric analyses; 9 stool analyses; 19 blood cultures, in which the typhoid bacillus was recovered 11 times, 8 cultures being negative; 25 Widal reactions; and 6,429 throat cultures.

During the year the following laboratory internes were appointed for one month each:—

John W. Abbott, Harvard Medical School.
Leland B. Alford, Harvard Medical School.
Alexander Burgess, Harvard Medical School.
Alexander Forbes, Harvard Medical School.
Henry T. Chickering, Harvard Medical School.
Thornton Stearns, Johns Hopkins Medical School.
Max Rohde, Johns Hopkins Medical School.
C. W. Rand, Johns Hopkins Medical School.

The following articles were published by workers from the laboratory:—

The Laboratory Work of the Danvers State Hospital, Hathorne, Mass., with Special Relation to the Policy formulated by Dr. Charles Whitney Page, Superintendent, 1888-98, 1903-10. By E. E. Southard, M.D.

The Margin of Error in the Diagnosis of Mental Disease: based on a Clinical and Anatomical Review of 250 Cases examined at the Danvers State Hospital, Mass., 1904-08. By E. E. Southard, M.D.

- A Study of Dementia Præcox Group in the Light of Certain Cases showing Anomalies or Sclerosis in Particular Brain Regions. By E. E. Southard, M.D.
- Ten Obscure Cases of Mental Disease: a Clinical and Anatomical Study. By L. B. Alford, A.B.
- A Study of the Senile Spinal Cord in Cases of Mental Diseases. By A. S. Hamilton, M.D.
- A Histological Study of the Thyroid Gland in Mental Disease, with Special Reference to Chronic Thyroiditis. By A. H. Peabody, M.D.
- Bacillary Dysentery at the Danvers State Hospital, Mass., subsequent to the Epidemic of 1908 (December, 1908–June, 1910). By Myrtelle M. Canavan, M.D.
- Organisms recovered from Dysentery Cases studied bacteriologically, December, 1908–June, 1910. Danvers State Hospital, Mass. By Myrtelle M. Canavan, M.D.
- The Persistence of Agglutinations for *B. Dysenteriae* in Danvers State Hospital Cases, together with a Series of Conglutination Tests. By Myrtelle M. Canavan, M.D.
- Mannite and Non-mannite-fermenting Organisms in a case of Dysentery, complicated by Hemorrhagic Endometritis, probably due to a Third Organism. By Myrtelle M. Canavan, M.D.
- Primary Adrenal Tuberculosis in a Case of Juvenile General Paresis with Meningeal Infection (*Bacillus Coli Communis*). By E. T. F. Richards, M.D.
- A Case of Autochthonous Sinus Thrombosis. By F. Robertson Sims, M.D.
- The Diagnosis of a Fractured Skull as aided by the Finding of Brain Tissue in the Vomitus. By Gordon T. Brown, M.D., Brant, Alberta.
- Note concerning Brain and Other Visceral Weights in Sixty-six Subjects showing Carcinoma of Sarcoma. By Newell B. Burns, M.D.
- Incidence of Heart Disease in Acute Psychoses, Danvers State Hospital, Mass., 1879–1909. By Albert A. Horner, 2d, A.B.
- Some Effects of Over-feeding with Fats in Certain Cases of Insanity. By Herman M. Adler, M.D.
- Bacterial Invasion of the Blood and the Cerebo-spinal Fluid by Way of Mesenteric Lymph Nodes: A Study of Fifty Cases of Mental Disease. By E. E. Southard, M.D., and M. M. Canavan, M.D.
- A Study of Errors in the Diagnosis of General Paresis. By E. E. Southard, M.D.

Building and Equipment. — The Danvers laboratory presents a marked contrast to the Worcester and Westborough laboratories, in that there is scarcely space enough for the work done, and the floors have needed shoring up to sustain the weight of apparatus and books that have been gradually added during the tenures of office of successive pathologists. These pathologists have maintained the routine of their predecessors and added new work. The chemical apparatus needed by Adler in his special ward work has crowded the laboratory still more. Some measures should be adopted to remedy these difficulties.

More Ward Physicians necessary. — It appears to the writer that one more physician each for the male and female sides would be necessary to avoid the fag of routine in the ward physicians, who are now just able to maintain the standard set for them by the traditions of the institution.

Westborough State Hospital Laboratory.

Extract from report of the pathologist, Dr. S. C. Fuller: —

The clinicopathological examinations have been pursued with the same vigor as in years previous, and the attempt to make the laboratory serve the immediate clinical needs of the hospital, as well as promote an active interest in the problems of psychiatry, such as may well be attacked in a laboratory of this character, have been continued.

Bacteriological examinations for the purposes of clinical diagnosis were made in 26 cases. In addition, 39 lots of autogenous bacterial vaccines for therapeutic purpose were made, the great majority of which were prepared by Dr. C. C. Burlingame. Clinical examination of the blood was undertaken in 63 cases, histological examinations of tissues from operation in 12 cases, complete urinalyses in 865 cases, and examination of stomach contents and feces in 15 cases. There were 41 autopsies performed, 38.57 per cent. of the deaths, of which sections from every organ have been made and filed, in all except the last 7, which are now in course of preparation.

The autopsies have furnished material for the study of a group of cases with special reference to certain alterations of the central nervous system, associated with psychoses in persons dying at an advanced age. This study, undertaken by your pathologist, has been completed, and by the time this report is printed will be ready for publication. A further anatomical study has been undertaken, in collaboration with Dr. M. M. Jordan of the women's service, dealing with certain cellular alterations of the neuroglial and vascular apparatus in a case with diffuse degeneration limited to the fiber tracts and portions of the gray matter of the spinal cord. In addition, Dr. H. I. Klopp, of the psychopathic division, and the pathologist have made a clinical analysis of all cases of so-called melancholia of involution, which were diagnosed in a five-year period of this hospital. The admissions, for the period from which our material was taken, numbered more than 800 cases. An abstract of the findings in this investigation was presented at the last meeting of the New England Society of Psychiatry.

The hearty co-operation of the wards and laboratory continues. For the encouragement and interest of the superintendent, the pathologist is deeply grateful.

The spirit of co-operation between wards and laboratory at Westborough is worthy of special commendation.

The difficulty of securing and keeping adequate technical assistance for the pathologist occasionally interrupts the continuity of work, since the pathologist is at times forced to drop diagnostic and theoretical work to maintain the routine of technique.

The laboratory building at Westborough rivals that at Worcester State Hospital. Fortunately, too, there is space in it for much more apparatus, which future expansion of work may require, and it is already utilized for staff and society meeting places.

Taunton State Hospital Laboratory.

Extract from report of the pathologist, Dr. C. G. McGaffin: —

The laboratory has received the hearty co-operation of the assistant physicians in obtaining permission for autopsies, and owing to this we have had a considerably larger number of post-mortem examinations than last year.

During the year past there have been 135 deaths, and 46 autopsies have been performed.

There have been several cases worthy of report. The microscopic findings in the brain of a Huntingdon's chorea case were especially interesting. The large cells throughout the cerebral cortex showed acute cell changes, — axonal reaction, breaking up of the Nissl granules and a thickening of the nuclear capsule. These changes were especially marked in the dentate nucleus of the cerebellum and in the Purkinje cells. The anterior horn cells did not show so much change.

The usual clinical examinations are carried on as required: blood, sputa, stomach contents and the Widal reaction.

A technician has been employed as an assistant in the laboratory, and, under the direction of the pathologist, has charge of the histological work.

An electric centrifuge has been installed, and greatly facilitates blood and urine examinations.

The card index of psychoses mentioned in the report of last year has been completed. Work is being done on family pathographies along lines suggested by the pathologist to the State Board of insanity, and in this the new index has been of the greatest value.

The medical conferences are being held regularly. Records of the conferences are filed among the notes of the cases considered, besides which the pathologist keeps a record for general reference.

Original articles have been read and published during the year by members of the staff. They are as follows: —

"A Short Résumé of Senile Dementia," read before a local medical society.

"Observations on the Use of the Sphygmomanometer as an Aid in the Diagnosis of Mental Disease," read before the Association of Assistant Physicians of Massachusetts.

"The Alcoholic Psychoses," published in the Albany "Medical Annals," December, 1909.

"An Anatomical Analysis of Seventy Cases of Senile Dementia," published in the "American Journal of Insanity," April, 1910.

McGaffin has started work upon the heredity of mental disease, working intensively upon special families and going into the field to secure facts not obtainable at the office. A first report of this work is to be made at the Field Workers' Conference of the Eugenics Section of the American Breeders' Association, at Monson State Hospital, May, 1911.

Taunton and Monson hospitals are the two institutions which have taken up intensive heredity work. Their results have already inspired other institutions to the employment of field workers, whose investigations secure not only data of theoretical importance, but also information of the greatest service in after-care and preventive work in the field of insanity.

The laboratory work, which was started on its present basis by Dr. H. W. Miller (now of Maine Insane Hospital, Augusta), is carried on with difficulty similar to that at Westborough, as a trained technical assistant, required for details of technique, is hard to keep, and the pathologist is forced for weeks at a time to do yeoman duty instead of the clinico-pathological work for which he is paid. This is unfortunately a condition that holds for all our institutions. Possibly conditions will improve if the training of such technical assistants could be undertaken at the Psychopathic Hospital. The work offers interest to men and women having manual skill, who would otherwise be typewriters and stenographers.

Boston State Hospital Laboratory.

Hygienic Work. — (1) *Diphtheria Epidemic of 1909.* — Extract from report of Dr. M. E. Morse, special investigator: —

One hundred and twenty-one strains of diphtheria and diphtheroid bacilli have been studied. . . .

The plan of work has been to determine what are the characteristics of most value in the identification of the diphtheria bacillus, and then to study the selected characteristics by exact and comparable methods in a long series of cultures.

The tests which have been found most suitable, and to which each strain has been, or is to be subjected, are: —

(1) Morphology, including the development of involution forms and of Neisser's granules.

- (2) Vigor of growth and longevity of the organisms in cultures.
- (3) Chromogenesis.
- (4) Virulence.
- (5) The quantitative determination, by titration, of acid-production by these organisms in dextrose, lactose, mannite, saccharose and dextrin broth.
- (6) Toxin production.
- (7) Serum reactions.

The results of the agglutination tests have been quite satisfactory, in spite of technical difficulties in getting homogeneous suspensions of diphtheria bacilli. True diphtheria bacilli have given positive reactions (by the macroscopic method) in high dilutions ($\frac{1}{2200}$) of serum from a rabbit immunized against *B. diphtheriae*, while pseudo and diphtheroid organisms show no clumping, even in low dilutions. It is possible that the agglutination test with anti-diphtheritic serum may prove to be a diagnostic procedure of some importance by furnishing a quick and easy way of distinguishing the true Klebs-Loeffler bacillus.

The importance of this method which Dr. Morse has worked out is great. It should save great amounts of time and expense in future epidemics, since quarantining and antitoxin injections in cases that can be readily proved to show *diphtheroid* and not *diphtheria bacilli* can be dispensed with. At Boston and Danvers hospitals in the past precautionary quarantining and antitoxin administration of many wards have been carried out which months later, in part by Dr. Morse's elaborate bacteriological studies, have been proved superfluous: the point is that scientific differentiation of the true from the pseudo diphtheria bacilli took longer than the period of epidemic danger. The delicacy of such a situation is increased by the well-known tendency of the two kinds of organism to grow under the same throat and nose conditions.

(2) *Paratyphoid Epidemic of 1910.* — The work on this epidemic is not yet scientifically complete. The nature of the epidemic was long in doubt, but was resolved by bacteriological methods to be paratyphoid fever. The peculiarity of the paratyphoid organism in sustaining itself at lower temperatures than other kindred organisms has caused the conditions of meat storage to be overhauled.

Extract from the superintendent's report: —

With the co-operation of the State and city boards of health a thorough investigation was made, which showed that the disease was not due to infection through any article of food or drink, but that it probably spread by contact from a "walking" case, contracted outside the institution. The opportunity was utilized for the prosecution of research

work on the epidemiology of typhoid and paratyphoid, and laboratory study of cultures from the blood and dejecta. For collaboration with Dr. Canavan in this work we are indebted to Dr. E. T. F. Richards of the Harvard Medical School, as well as to Dr. Southard, pathologist to the State Board of Insanity, who gave valuable advice and helped to shape the inquiry.

Routine work is now well under way in newly fitted up rooms under Dr. Myrtelle M. Canavan, who has adequate technical assistance. As at Danvers, special attention is paid to the bacteriology of cases.

Extract from the superintendent's report:—

The recent addition to the staff of a junior assistant physician has given needed assistance in the clinical work, and the opening of a well-equipped bacteriological and pathological laboratory toward the close of the year, with a skilled and enthusiastic worker in charge of this department, puts the medical work on a higher level, and, like the staff meetings, promotes keener interest and a progressive scientific spirit. That advantage is taken of the new facilities afforded by the laboratory is shown by the more frequent employment of diagnostic aids, such as blood examinations and lumbar puncture, also by the increased number of autopsies obtained; of these there have been 12 during the year, 5 of them in the past two months.

Northampton State Hospital.

The growth of this institution in point of numbers now warrants the installation of a laboratory large enough for work in epidemics and for more intensive clinico-pathological studies than are possible with the present facilities.

The local public confidence which this institution enjoys is very promising from the standpoint of social service. Social workers having special training in securing family data would find western Massachusetts a rich field, not alone theoretically, but from the standpoint of local individual helpfulness in the direction of after-care and prevention.

Monson Hospital field work has dipped into this field to some extent in epilepsy and feeble-mindedness. But the distribution of insanity may well prove to be different from that of defective conditions. Intensive work on the distribution of insanity in two such different districts as the Taunton and Northampton districts is most promising.

Monson State Hospital

enjoys, besides its well-known economic reputation, most of the modern arms of *special service*, including (a) an active autopsy service for clinical correlations in Massachusetts; (b) an experimental service for study of theoretical conditions; (c) a field service for the study of hereditary conditions, both of epilepsy and of feeble-mindedness, in the regions producing them. Also, a special library of epilepsy literature is being rapidly built up, which will some day be a Mecca for institution workers in this field.

Extract from the superintendent's report:—

Mr. Leland B. Alford was appointed pathologist Aug. 7, 1910. A report of his plan of work is briefly outlined.

He has continued the study of Brown-Sequard epilepsy in guinea pigs, begun by Dr. Taft in the endeavor to demonstrate its relation to human epilepsy, and possibly, by comparing the condition in man with that in the animal, to gain some light on the disease in the human being. But whereas Dr. Taft did her work along the line of transmission of the condition from parent to offspring, and the effect on the nutrition and reproductive functions, Mr. Alford is making a study of the nature of the condition itself; the ways in which it may be produced; the means by which it may be prevented; its relation to the nervous system anatomically and physiologically, and the correspondence with certain other reflex conditions also seen in the guinea pig, as, for instance, the normal scratch reflex, the anæsthetic scratch reflex and the scratching reflex that sometimes follows injury to the head.

Aside from this, certain pathological work on the cases that come to autopsy is being done. This consists of an intense study of some unusual cases and the routine histological examination of all cases.

The introduction of accounts which will indicate clearly the expense of maintaining each separate ward and department is now completed and will be of much service.

The continuation of the work of collecting a library on epilepsy has been a special care. The library now consists of 91 books and 260 subjects. Number of subjects on the list to be searched out and placed on shelves, 73.

An account of the medical conference held here February 11 has been printed, and the plans for a similar conference this winter, with the probability of making the subject of inheritance the main feature, are under way. This will be announced in due time.

The appointment of Miss Danielson as a field worker under the patronage of the American Breeders' Association we have arranged with Dr. Charles B. Davenport of Cold Spring Harbor, N. Y., secretary of the committee on eugenics. The work briefly outlined is as follows:—

Miss Danielson visits the families of our patients in selected cases and follows from one to another until she has obtained a very complete pedigree of a given family. A sufficient period has not yet elapsed to obtain a large number, but the effort has been to make a thorough work of a few families. Results can only be looked for in the future, but certainly the indications are that much good can be done. The families themselves will be benefited; the institution will have more complete records of the cases, and that at a very moderate cost to the institution. We shall be able to furnish facts to the proper authorities as to where degenerates are more likely to breed within the State borders. A further result of the work will very likely be an extension of this same line of inquiry under a more central authority, and the co-operation of certain other institutions in accordance with a mature and broadened plan.

The practical issue of this kind of work, systematized and extended, seems likely to tend to the illumination of the sequestered foci of degeneration, crime and peculiarities, publicity and consequent outflow of some individuals, and an attenuation of the taint. Much practical good and even a diminished ratio of degenerates seem within the range of possibility.

McLean Hospital.

Extract from the superintendent's report:—

In the clinical laboratory "effort has been made to have the individual notes full and comprehensive, even if made at comparatively long intervals, rather than to write briefer and more fragmentary notes at shorter intervals. The ideal aimed at is to describe the patient's total reaction to the total environment, not only at the time of each examination but continuously. The nurses in the course of their training have long been taught to make pretty full daily notes, especially of new patients and of those whose condition is not stationary, and their observations are frequently very valuable additions to those of the physicians, often giving details of conduct which the latter cannot observe at first hand. The weekly conferences over recent admissions have been held as usual, and to them a few physicians have come from time to time by invitation."

"Work has been begun on involution psychosis, and on the question of the significance, if any, of hallucinations in manic-depressive psychosis. Both subjects require much work and time for their completion."

In the psychological laboratory "most of the experimental work was devoted to studying the effect of practice on individual differences. The free association experiment was also made the object of further investigation. On both of these topics a considerable amount of material has been gathered, something less than half of which has yet been prepared for publication. The work on the standardization of association tests, undertaken jointly with Professor Woodworth, has also been continued. No special additions to the laboratory equipment have been found necessary."

In the chemical laboratory, "the completion of the work on the separation of alkylamines from ammonia has made possible the research of alkylamines obtained from urine by Kjeldahl digestion. As this is a new field in the study of urinalysis it is to be followed by application of the method to a considerable number of specimens, in order to establish the law which determines the quantity and quality of alkylamines found in normal as well as in pathological urine. Because of the interesting data so far obtained, which seem to promise more definite results than the work on protagon, the latter has been temporarily abandoned."

ASYLUM MATERIAL.

As emphasized last year, there is an important task to be subserved by those institutions classified as asylums. In them we should study, both in life and post-mortem, the accuracy of our earlier diagnoses and the appropriateness and effects of our treatment. I find that the asylum officers do not receive in all cases from the hospital officers histories of their transfers sufficient for adequate diagnosis. Work is here repeated, or, in the press of business, left undone in the asylums, — a condition easily remedied by the transmission of full digested histories to the asylums by the hospitals. The number of autopsies performed in the asylums is far too low, and we are constantly losing valuable knowledge concerning the nature of insanity through this deficiency. But what incentive to the performance of autopsies can there be if the early histories of dead patients are not known to the local officers?

THE SCIENTIFIC WORK OF THE INSTITUTIONS.

The above extracts from special hospital reports show the prevalence and the increase of a scientific spirit in the institutions. A concrete sign of this spirit is the existence of laboratories and special laboratories in five of the six State hospitals. The sixth (Northampton) is obviously now grown large enough to warrant a special pathological officer and special equipment.

The problems of this work arise in the patient, particularly in the acute and early phase of his illness, the stage of diagnostic doubt and of therapeutic uncertainty. The time is past when the diagnosis in mental disease can be safely rendered without recourse to finer methods of diagnosis. To diagnose syphilis of the nervous system requires resort to laboratory devices. But in a very important fraction of our cases the establishment or exclusion of this diagnosis of syphilis is essential to rational treatment.

Again, the establishment of the diagnosis of various forms of acute infection of the nervous system, underlying the toxic deliria, requires finer bacteriological methods only applicable in laboratories.

In short, the establishment of laboratories in our hospitals dealing with patients in acute phases of mental disease has become as essential as in general hospitals, and Massachusetts is to be congratulated upon the spirit of the superintendents and trustees of the hospitals in perceiving and executing the laboratory idea as thoroughly and consistently as have any of the States. Especially is it evident from the reports excerpted above that the demand for laboratories has been a genuine local demand, born of the diagnostic necessities of the patients in the hospitals and only to a lesser extent dominated by the prevailing fashion.

At least for the present,

HYGIENIC PROBLEMS ARE PRESSING,

derived from questions like these: What shall be done with epidemics of *diphtheria* (Boston and Danvers State hospitals) and of apparent *typhoid fever* (Boston State Hospital)? What measures should be adopted to avoid the constant discomfort and expense of *bacillary dysentery* in certain hospitals? Similarly, tuberculosis, both of patients and of cattle, has demanded attention. As shown above, some of these incidental problems have been helped to a partial solution.

The determination of the apparent typhoid epidemic at Boston State Hospital to be *paratyphoid fever*, and the review of meat-storage conditions entailed thereby (the paratyphoid bacillus being particularly hardy in the presence of temperature changes), has been a valuable determination, made by the pathologist, Dr. Myrtelle M. Canavan, aided for a time by a special worker, Dr. E. T. F. Richards, formerly assistant physician at the State Infirmary, Tewksbury.

An approximately exact idea of the mechanism of spread of diphtheria in the small and well-controlled *diphtheria* epidemic at Danvers State Hospital was obtained by the pathologist, Dr. H. M. Adler, aided by Dr. Canavan during her Danvers service. This determination will be of service in future epidemics.

The special work on *diphtheria and diphtheroid bacilli* done under the auspices of the Boston State Hospital by Dr. M. E. Morse has been brought to an interesting conclusion in the determination of

an improved method for telling the two groups of bacilli apart; and the new method will probably prove of practical service in future epidemics by doing away with the necessity of wholesale immunizing of great groups of patients whose throats really contain diphtheroid and not true diphtheria organisms. Heretofore such patients have had to be immunized or quarantined for safety's sake. Dr. Morse's work has now passed beyond the scope of State hospital work into the biological field, and is being carried on under other auspices.

The elaborate investigation of *bacillary dysentery* at the Danvers Hospital in 1908 was published in larger measure in 1909,¹ and has been issued in the form of a monograph of 145 pages to hospital workers and persons engaged in the study of the dysentery problems. To the original ten papers have now been added four others by Dr. M. M. Canavan, dealing with conditions subsequent to the epidemic,² and it is hoped that the work can be brought to a conclusion by a study of dysenteric ulcer-production to be brought out in 1911. Our work has apparently convinced the medical and the nursing staff (a practical matter of high importance) that "summer diarrhoea" is not a necessary evil or a product of digestive indiscretions. *How to combat flies* became a common topic of the menage.

Dr. S. T. Orton's work on a similar epidemic at Worcester Hospital took up the fly question specifically. Orton demonstrated the capacity of flies to carry bacteria from one end of the hospital to the other, and has been able to afford an optical demonstration of value in the problem of *bacillary dysentery*.³

All the work on dysentery both at Worcester and at Danvers seems to have been justified, if only because the small minority of institutional assistants who believed that dysentery was a "necessary summer evil" have been silenced. The morale of attendants in respect to this bacillary disease, and the expense entailed by it, can only be maintained by proper attitude to the disease of assistant physicians.

With respect to *tuberculosis*. The bovovaccinations carried on by Dr. C. W. Page at Danvers State Hospital, and described by

¹ "Report of an Epidemic of Bacillary Dysentery at the Danvers State Hospital, Massachusetts, 1908." Boston Medical and Surgical Journal, Vol. 161, p. 679, November, 1909.

² M. M. Canavan: "Four Papers on Dysentery," Boston Medical and Surgical Journal, Vol. 163, p. 150, August, 1910.

³ S. T. Orton and W. L. Dodd: "Experiments on Transmission of Bacteria by Flies, with Special Relation to an Epidemic of Bacillary Dysentery at the Worcester State Hospital, Massachusetts, 1910," Boston Medical and Surgical Journal, Vol. 163, p. 863, December, 1910.

him in the report on "Tuberculosis in Massachusetts," have proved almost negative in the particular form at that time advised by Behring, the originator of the method. Dr. Mitchell has now been able to secure the co-operation of Prof. Theobald Smith for a further testing of this method modified in important ways. The result of this work will be watched with interest by the hospitals of the State, which, on Nov. 30, 1910, owned milch cows to the number of 904.

The hygiene of State hospitals for the insane bids fair to be a subject of the greatest importance in the progress of public health work in general. Though not obvious at first sight, it is true that no other conditions are so favorable for the exact study of epidemics in man as the conditions of (a) regimen; (b) surveillance; (c) variety of life; (d) most important of all, presence of laboratories and laboratory workers found in modern State hospitals. Steps are being taken to present these facts at the Fifteenth International Congress of Hygiene and Demography which meets at Washington in 1912. It is proposed to show by charts the work of Massachusetts in this field, and to stimulate thereby the co-ordination of such work in other States. Elsewhere it has always been possible for hospitals to secure special government workers or some local enthusiasts to work with precision in these epidemics; but neither the origin nor the subsidence, and especially not the inter-epidemic conditions, have been studied so well as in Massachusetts, whose State hospital laboratories have been constructed

ABOUT A HYGIENIC NUCLEUS,

in the sense that the first apparatus installed has been apparatus of equal service in hygiene and in psychiatry, and the pathologists have been imbued with the salutary modern idea that no sharp lines separate psychiatry from the rest of medicine and hygiene. Therefore, although a certain amount of energy has been spent by our pathologists on hygienic problems, I have felt the energy well spent, and have encouraged the ideal of the hygienic utility and advantages of our hospitals.

Our main business,

THE PSYCHIATRIC WORK

of the institutions, is of course in the first instance a practical matter. The questions are: What is the matter with this individual patient? and, What is to be done for and with the patient? The first or *diagnostic* question is more complex than formerly. I have considered it my first duty to investigate the results of diagnosis at our institutions and to establish the percentages and grounds of error in diagnosis. In my conferences with institutional officers I have found it more and more useful to recall the Danvers results in the diagnosis of a severe organic disease, *general paresis*, the mental disease about which possibly we know most. It is very salutary to be able to state that out of every *hundred* cases which are termed in serious medical consultation cases of general paresis, *ten* are probably not cases of general paresis and *seven* may never have had syphilis.¹

Such an outcome of routine autopsy work is most "practical," and shows concretely why we should work harder in the interest of the prognosis and treatment of our patients.

THE WASSERMANN TEST

for the existence of substances, in blood serum or spinal fluid, due to syphilis has proved of value in our diagnosis. It seems that (1) certain symptoms and signs, (2) a certain cell-picture in the spinal fluid, and (3) a positive Wassermann reaction in blood serum and spinal fluid pretty well assure the diagnosis of general paresis. At the same time, Plavt's work in Kraepelin's Munich clinic shows that cerebro-spinal syphilis, a disease allied to general paresis but having a very different course and prognosis, yields the same findings, except that the spinal fluid gives a negative Wassermann test. This important distinction is being tested thoroughly by some of the institutions, which are using the facilities afforded by the department of neuropathology of the Harvard Medical School, which gives space and apparatus so that Dr. E. W. Mooers, formerly of Worcester, Northampton and McLean hospitals, and more recently at Munich, may carry out these exacting tests.

¹ E. E. Southard: "A Study of Errors in the Diagnosis of General Paresis," *Journal of Nervous and Mental Diseases*, Vol. 37, p. 1, January, 1910.

THE PRECISE STUDY OF ERRORS IN DIAGNOSIS,

however unfashionable, seems to me to be the fountainhead of therapeutic improvement. It is surprising how the attitude of exact diagnosis is reflected from superintendent to assistant physicians, from these to internes, from the physicians to the nurses and attendants, and, last but not least, from the whole hospital machine to the patients themselves. I am told that a patient who had not spoken a word for years in the presence of any suggestion spoke at last when a throat culture was being taken! The most refractory case of will-disturbance is at times fundamentally accessible to a genuine attempt at diagnosis, especially if this attempt be made from the side of internal medicine.

Let us study our cases as physicians,

NOT PRIMARILY AS ALIENISTS,

and we shall not only uncover many cases of visceral nonnervous disorder which will indicate treatment, but also we shall approach our patients from the best angle of observation.

SUPERCUSTODIAL TREATMENT

of our patients, that is, "individualized" treatment in its best sense, is not a mere matter of creature comforts, but depends on

THE DIAGNOSTIC SKILL OF THE STATE'S PHYSICIANS.

Last year I deemed it "my first duty to discover the means of diagnostic improvement in our hospitals." This year I have found no more profitable field of work, and have supplemented the work on general paresis noted above and the work on senile dementia,¹ with a study of

THE MARGIN OF ERROR IN THE DIAGNOSIS OF MENTAL DISEASE.²

The major indication of this study is that "the majority of the real diagnostic difficulties uncovered would appear to require more intensive work in the field of clinical pathology." Such cases as streptococcus septicæmia, streptococcus meningitis, cerebellar ab-

¹ E. E. Southard: "Anatomical Findings in Senile Dementia: a Diagnostic Study bearing especially on the Group of Cerebral Atrophies," American Journal of Insanity, Vol. 66, p. 673, April, 1910.

² E. E. Southard: "The Margin of Error in the Diagnosis of Mental Disease; based on a Clinical and Anatomical Review of 250 Cases examined at the Danvers State Hospital, Massachusetts, 1904-08," Boston Medical and Surgical Journal, Vol. 163, p. 155, August, 1910.

secess, would undoubtedly have stood a good chance of being diagnosticated in a hospital equipped and manned as is to be the new Boston Psychopathic Hospital. It is equally true that such cases will appear in other hospitals than the new Psychopathic Hospital, and that *psychopathic wards should undoubtedly be maintained at all institutions receiving new patients.*

THE NEED FOR THE PSYCHOPATHIC WARD IDEA

in our institutions is not merely administrative, but is in the highest sense therapeutic. It is not merely that a victim of brain abscess should not be regarded as a mental case; it is rather that such a case requires differential treatment.

THE TERM PSYCHOPATHIC

has no false connotations. It denotes precisely what it states. It does not suggest lunar influences (lunacy), nor is it euphemistic in referring to unsoundness abstractly (insanity). It applies to conditions in which the mind is somehow affected. It does not rank one so classified as a person legally committed or to be committed. It is a medical, not a legal, term.

THE PSYCHOPATHIC WARDS OF GENERAL HOSPITALS

will go far toward aligning the public properly on the whole question. If all the local medical schools can evolve toward a more thorough curriculum in practical or clinical psychiatry, the State's work will greatly benefit, since there will then accrue

BETTER DIAGNOSES BY GENERAL PRACTITIONERS,

who are the first, as a rule, to see the cases. To be sure, the diagnosis of the particular form of mental disease is not easy at the outset. There may easily be a sound tendency to leave many cases "unclassified;" but if back of this diagnosis

"UNCLASSIFIED"

there exists a good objective clinical description of the case, the patient will not lose for the lack of a name. The Danvers Hospital physicians are peculiarly prone to the diagnosis "unclassified." Of 415 cases not diagnosticated in Massachusetts hospitals, 1904-08, 145, or 35 per cent., were Danvers cases. This is largely a

matter of hospital tradition. The records are now so made in practically all our institutions that, no matter what the future nomenclature, enough facts will be available for a proper diagnosis.

FOUR PER CENT. OF CASES OBSCURE EVEN AFTER AUTOPSY.

The 10 cases (of the 250 above noted) which remained obscure after autopsy were especially studied by L. B. Alford, a special laboratory interne (1910) at the Danvers Hospital. It is interesting that none of these cases fell in the "organic" group. The important evidences of "toxic" disturbances in several of the cases again lead to the hope that the facilities at the Psychopathic Hospital for the study of "internal" and nonnervous medicine, as psychiatric medicine, will

REDUCE THE MARGIN OF ERROR.

Some progress has also been made in the work on the nature of mental disease at large. It is well known that much psychological work has recently been done in the abnormal mental life, and

THE PSYCHOGENIC HYPOTHESIS

may be said to have become the mode in many circles. The claims of this hypothesis have been so extravagant in some quarters that some of our Massachusetts critics have perhaps not given its evidence due weight. Very temperate and concrete have been the criticisms and contributions in the field of psychopathology made by Dr. F. Lyman Wells, who has recently left the McLean Hospital to work in Columbia University. More workers in experimental and observational psychopathology are a crying need.

The discussion at the Triennial Congress in Washington (1910), at which the writer was delegate, developed an apparently sharp issue concerning dementia præcox between

THE "MIND TWIST" AND "BRAIN SPOT" HYPOTHESES

as to the production of a disease which in its very various forms tends to fill our institutions. The theoretical conclusions of the writer, as presented at Washington, for the moment seemed to favor the *latter of the two hypotheses*.¹ It is probable that the

¹ E. E. Southard: "A Study of the Dementia Præcox Group in the Light of Certain Cases showing Anomalies or Sclerosis in Particular Brain Regions," Boston Medical and Surgical Journal, Vol. 163, p. 47, August, 1910.

data concerning mental tangles and those concerning all diseases will be found in alliance before many years. At all events, it will not be wise to neglect either, and it would be decidedly

UNWISE TO DISJOIN PSYCHOPATHOLOGY AND NEUROPATHOLOGY.

Further work on different material (Worcester, Taunton) is now being carried on to learn whether the writer's conclusions concerning dementia præcox have a general application. The writer is working further on dementia præcox, and also upon the lesions in the first thousand Danvers autopsies on all types of mental disease. This work has been possible on account of the card index of lesions prepared by the writer, with Dr. M. M. Canavan, which involved the personal review of each autopsy protocol. The clinical correlation will be made possible by the

CARD INDEX OF CLINICAL SYMPTOMS

produced under supervision of Dr. C. W. Page, which covers all cases that have ever been committed to the hospital since the opening in 1879. This index will remain a mine of information for years.

HEREDITY AND EUGENICS.

As secretary of the committee on insanity of the eugenics section of the American Breeders' Association, the writer has had the advantage of many communications with the officers of the section, and especially with Dr. C. B. Davenport of the Carnegie Laboratory for Experimental Evolution. Much collecting of data has been done in a selective way in order to determine the best lines of attack, and, subsequent to the period covered by this report, these data will have been presented at the Columbus meeting of the Breeders' Association. The question of sex-limited inheritance, of inheritance of special forms of insanity, the Mendelian question, have been taken up. At present a study of the geographical distribution of insanity in Massachusetts is being undertaken.

TO SUM UP,

advances have been made in

(1) The spirit of exact diagnosis and the study of errors in diagnosis.

(2) The drawing together of ward and laboratory staffs, effected by concrete contributions by the laboratories to epidemic problems

(dysentery, diphtheria, paratyphoid fever) and to psychiatric diagnosis (general paresis, senile and organic dementia, "unclassified" cases).

(3) The grounding of the laboratory work in the problems presented by the patient.

(4) Work on the structural basis of imbecility (Orton at Worcester Hospital).

(5) Work on the nature of degenerations due to upset of fat metabolism (Adler at Danvers Hospital).

(6) Epilepsy, throwing new light on the peripheral factors in certain epilepsies (Alford at Monson Hospital).

(7) Family pathography (McGaffin at Taunton Hospital).

(8) Heredity of defectives (Danielson at Monson Hospital).

(9) Insight into the future task of the Psychopathic Hospital in applying the principles of internal medicine to psychiatry (Alford's Analysis of "obscure" cases at Danvers Hospital).

(10) The better understanding of association tests in psychopathology (Wells at McLean Hospital).

Respectfully submitted,

E. E. SOUTHARD,

Pathologist.

TRAINING SCHOOLS FOR NURSES.

Ten of the public institutions under the supervision of the Board have established successful training schools for nurses. There is also one at the McLean Hospital, where the first class was graduated in 1886. Of the public hospitals, the first graduates were sent out from Danvers and Westborough in 1891. Schools in the other public hospitals were subsequently established at various intervals, the last one in 1902. All of the hospitals and asylums for the insane now have organized schools giving instruction to their female nurses. There are four hospitals giving courses for their male nurses also, but in one only is this course compulsory. All of the superintendents report that their patients are better served since the establishment of these training schools, and the majority of the superintendents affirm that the intellectual and educational standard of the nurses has been raised. The supply of pupil nurses is reported generally abundant in five institutions and generally insufficient in the remaining six.

In seven hospitals all of the female nurses are either pupils in the school or graduate nurses, while in the remaining institutions from 20 per cent. to 85 per cent. are members of the training school. One institution sends its nurses to a large general hospital for three months' service, four have an arrangement for post-graduate courses for their graduates in general hospitals, and two give their pupils some opportunity for private work under local physicians in the community during their course of training. At Tewksbury, where there is a large general hospital department, with considerable surgical and medical work, a lying-in department and a department for the insane, the pupils in the training school get an unusual variety of experience in one institution. The length of the course is two years in seven schools, two and one-quarter in one, two and one-half in one and three years in one.

The New England born among the pupil nurses varies from 25 per cent. to 60 per cent. All of the institutions have in responsible positions graduate nurses, of whom the whole number, or a very large proportion, are graduates of their own school.

Five hospitals report that it is no more difficult to get satisfactory pupils for the school than to get satisfactory attendants, and all of these five, with one exception, report that they have an abundant supply of pupils. The five that have more difficulty in getting pupils than attendants report a lack of supply of both.

The number of probationers who finish the course varies in wide limits in the different hospitals. About 50 per cent. of the probationers, on an average, graduate. On the first of November, 1910, there were 654 female pupils in these schools. The widening of the practical experience of the pupils by the opportunity to serve in general hospitals or other special hospitals would seem to be a desirable provision. In this way the course of training would be more attractive to the pupil, and the broader experience would develop a more generally efficient nurse. The difficulties of making such arrangements with other hospitals or schools, and the inadequate supply of the most desirable candidates for nursing, are some of the ob-

stacles encountered. The improvement of the training school courses by sending pupils out to nurse in private families, under the supervision of competent and interested physicians, has been resorted to, and doubtless might be more widely attempted in some localities.

The problem of bettering the quality and stability of the nursing service in our State institutions has been solved only in part by the establishment of the training schools. A greater improvement in the female service than in the male service has been secured.

It is doubtful if a course of training for men could be made obligatory on all. Nevertheless, systematized instruction for these men should be furnished, even if no examination or standard of acquirement other than practical efficiency is insisted upon. Training and instruction for male nurses in methods of care, treatment, management, occupation and diversion of patients, in addition to drill in the hospital rules and regulations, is desirable and possible, and should be developed in each institution with special reference to the local needs. It cannot be too clearly borne in mind, in a consideration of this problem, that the duties required of nurses are often trying in the extreme; that a naturally even disposition and an educated self-control are essential elements of character, and that in so great a body of men and women into whose efficient performance of duty enters so largely what may be called the human element, there is likely always to be found those who are less fitted for the work and incapable of adapting themselves to it. The possibility of unkind, inconsiderate and impatient dealing with patients, even by the best selected and educated nurses, must always, therefore, be recognized, even though it be made remote as possible, and the difficulty of getting at the personal equation in matters of friction or alleged unkindness is manifest. The ideals of the nurse, and his or her interest in the work, depend not only on the character and caliber of the nurse but also on the spirit, purpose and earnestness of the superintendent and his assistants, including the superintendent of nurses and the supervisors, who reflect the policy and attitude of the management.

After a careful selection of nurses, and the subsequent early weeding out of those unfit for the work, the education of the remainder is the problem most within the control of the hospital. The work should be made so attractive to honest and serious-minded men that they will engage in it and remain in it, as in other trades and professions. The hours of work, the pay, the opportunities for relaxation and freedom from hospital responsibilities and hospital atmosphere are important considerations to this end. Provision for social life when off duty, and the furnishing of opportunity for amusements and diversions, especially in institutions more remotely situated, have been found helpful.

The providing of separate homes for married attendants, and the establishment of conditions which will make it possible for desirable nurses to continue their services in the hospital and live normal lives, are being recognized. Such provision is being made at some of our institutions. It is one of the practical ways of improving the stability and efficiency of the nursing service.

The establishment of training schools and the interest and work in educating nurses have doubtless been retroactive on the medical staffs of our hospitals, and therefore doubly on the welfare of our patients. Legislation, required reports, rules and penalties will not and cannot advance the spirit of humanity in this matter nor create the *entente cordiale* between the whole body of workers in the hospital which will insure the success of any policy.

OCCUPATION AND DIVERSION.

Besides the training school curriculum there are many other factors entering into the nurses' education. These include all of the methods and customs of dealing with the daily problems of institution life, and the more subtle formative influences which shape her habit of thought regarding her patients, her duties and the hospital.

An illustration of this is found in the attitude of the superintendent and physicians toward the matter of restraint and seclusion of patients. The readiness or reluctance to sanction

such procedure, and the resourcefulness of the physicians in suggesting other efficient means of treatment, have a powerful educative influence on the nurse.

An arrangement of the nurse's duties so that they will include something more than mere attention to housework and the physical needs of her patients can be aimed at. The emphasis of a personal responsibility for the patient's mental comfort can be taught. Here especially opens the wide field of occupation and diversion for the patients. The authorities recognize that efforts to occupy and entertain or divert the patients should be required, but they are slower to recognize that the successful fulfillment of their requirement depends on their efficient co-operation with the nurse. It is only when such co-operation is organized, and the nurse is led by suggestions, encouragement and opportunities, that her interest and effort can be evoked and sustained. It is a creditable showing which our hospitals make to-day in the number of patients who daily do more or less useful work for the institutions. Indeed, it is doubtful if a much larger number of patients could be occupied under the existing conditions of incomplete organization and limited opportunity. Other opportunities and inducements must be furnished. The control of these matters must be systematized under the leadership of a special and competent person who is able to grasp the problem, and who is resourceful, tactful and patient in attempts to solve it.

Every hospital has its large numbers of patients who are capable of doing so little or such poor work that it is not worth while to set them at it because it would impede rather than hasten the routine necessary work of the ward, laundry, farm, etc., as the case may be.

The desirability of taking these from an idleness which hastens degeneracy and promotes mischievousness and restlessness has long been recognized, but hitherto not successfully dealt with. It is with such as well as with the more recent and convalescing cases that further effort is demanded. To further meet their need, different kinds of occupation and diversion should be furnished, both on the wards and elsewhere, so that the un-

used increment of energy may be put to some constructive use and diverted into more desirable channels, while the inactivity of others is stimulated to activity of a sort helpful to the patient, at least. This means the introduction of opportunities for work and diversion which is of less value and perhaps of no value to the institution. It might include hand-craft occupations or even kindergarten methods, and should have the closest supervision.

It clearly demands a special organization in charge of an individual who can give his full attention to it, work with the patients, interest and instruct the nurses, and make them responsible for the continuance of work which he sets in motion. Such persons can be found, but not without difficulty. A slight increase in the nursing force may be necessary, but even without it the nurses and employees can become efficient assistants in a well-organized effort in this direction. The importance of the leader, however, cannot be overestimated.

Small groups of idle patients can be trained to do some special work, or even two or three kinds of work, while changes of occupation or new diversions from time to time may be desirable. The leader may also be able to give some attention to more purely recreative diversions from time to time, not for the whole institution, but for wards, or smaller groups with tastes or interests more in common. The special forms of occupation or diversion to be adopted will vary with the local conditions, needs and opportunities, as well as with the special interests, resourcefulness and ability of the leader. The aid of friends of the hospital can be helpfully solicited and obtained to the same end.

Such methods of education of our nurses are rational and practical, and will be sure of popular support if wisely carried out. It seems possible, also, by the open adoption of these and similar methods, to gain the hearty co-operation of the public, the legislators, the trustees and the physicians in and out of the hospital. When such combined effort is made the whole spirit of our hospitals will be more positively right, and the causes for complaint will be to a greater degree done away with.

The organization of a department of occupation and diversion in each institution would be one of the most practical and efficient helps in the solution of the problem of restraint and seclusion.

COMMITMENTS FOR OBSERVATION AND TEMPORARY CARE.

The number of commitments for observation (under section 43, chapter 504, Acts of 1909) was 19 for the year. The period designated by the judges in these various cases was usually thirty days. Two were committed for ten days, 1 for fifteen days and 1 for five weeks.

Of these cases, 10 were subsequently committed, 1 signed a voluntary request for continued hospital residence, 1 was discharged recovered, 3 not insane, 1 was discharged to the judge, 1 to the probation officer and 2 to no care.

It is believed that this law will be more widely used as its advantages are better known.

Under chapter 307 of the laws of 1910, requiring that emergency cases which come into the care or protection of the police in Boston be taken to the Boston State Hospital for temporary care, and forbidding the use of prisons, jails or penal institutions for such persons, 129 persons were taken to the Boston State Hospital. Of these, 88 were subsequently (within the seven-day limit) duly committed, 39 were discharged, 1 died and 1 was deported.

Two cases only were admitted for temporary care under section 44 of chapter 504.

For more detailed notice of this work, see the abstract from the report of the superintendent of the Boston State Hospital, page 120.

ALL CLASSES UNDER CARE.

The number and location of these classes Oct. 1, 1910, were:—

LOCATION.	Insane.	Feeble-minded.	Epileptic (Sane).	Inebriate.	Total.	Voluntary Mental (not Insane).	Temporary Care.	Other Classes.
Worcester State Hospital,	1,373	-	-	11	1,384	-	-	-
Taunton State Hospital,	1,008	-	-	2	1,010	1	-	-
Northampton State Hospital,	851	-	-	-	851	4	-	-
Danvers State Hospital,	1,474	-	-	8	1,482	-	1	-
Westborough State Hospital,	1,017	-	1	14	1,032	9	-	-
Boston State Hospital,	851	-	-	-	851	-	10	-
Mental Wards, State Infirmary,	720	-	-	-	720	-	-	-
Worcester State Asylum,	1,101	-	-	-	1,101	-	-	-
Medfield State Asylum,	1,700	-	-	-	1,700	-	-	-
Gardner State Colony,	625	-	-	-	625	-	-	-
Monson State Hospital,	357	-	413	-	770	-	-	-
Bridgewater State Hospital,	708	-	-	-	708	-	-	-
Foxborough State Hospital,	194	-	-	109	303	-	-	-
Family care,	275	-	-	-	275	-	-	-
Massachusetts School for the Feeble-minded at Waltham,	-	1,353	-	-	1,353	-	-	-
Wrentham State School,	-	214	-	-	214	-	-	-
McLean Hospital,	216	-	-	-	216	1	-	-
Twenty-three other private institutions,	104	-	2	2	108	12	-	49
Hospital Cottages for Children,	-	17	101	-	118	-	-	20
Elm Hill Private Home and School for the Feeble-minded,	-	53	-	-	53	-	-	-
Terrace Home School,	-	10	-	-	10	-	-	-
Almshouses,	-	199	-	-	199	-	-	-
Total under care,	12,574	1,846	517	146	15,083	27	11	69
Viz.:—								
Public care,	12,254	1,783	515	144	14,696	14	11	20
Institutions,	11,979	1,584	515	144	14,222	14	11	20
Family care,	275	-	-	-	275	-	-	-
Almshouses,	-	199	-	-	199	-	-	-
Private care,	320	63	2	2	387	13	-	49
McLean Hospital,	216	-	-	-	216	1	-	-
Twenty-four private institutions,	104	63	2	2	171	12	-	49

THE WHOLE NUMBER OF THESE CLASSES

under care Oct. 1, 1910, was 15,083, being 1 such person to every 223 of the population of the State. Of this number, 12,574, or 83 per cent., were insane; 1,846, or 12 per cent., feeble-minded; 517, or 4 per cent., epileptic (sane); and 146, or 1 per cent., inebriates. Their increase for the year was 709. Of this number, 522, or 74 per cent., were insane; 114, or 16 per cent., feeble-minded; 53, or 7 per cent., epileptic (sane); and 20, or 3 per cent., inebriates.

The whole number of such persons under public care was 14,696; under private care, 387.

The whole number of such persons in public institutions was 14,222; their increase for the year, 691; their average annual increase for the last five years, 603.

THE INSANE

under care Oct. 1, 1910, numbered 12,574, being 1 insane person to every 268 of the population of the State. In addition, there were 644 persons who were temporarily absent from institutions, and a considerable number of others in the community who had been previously discharged or had never appeared in institutions for the insane.

The insane appear under public care in public institutions and boarded out in family care, at public expense, and under private care in private institutions. Their number and increase in these locations for the year, the last five years, the last ten years and the last twenty-five years are shown as follows:—

	NUMBER OCT. 1, 1910.			INCREASE OVER PREVIOUS YEARS.					Average Increase, Five Years.	Average Increase, Ten Years.	Average Increase, Twenty-five Years.
	Males.	Females.	Totals.	1910.	1909.	1908.	1907.	1906.			
Public institutions, .	5,961	6,018	11,979	489	499	789	376	172	465.0	397.2	333.00
Family care, . . .	14	261	275	34	3 ¹	31 ¹	10 ¹	32	4.4	15.0	11.00
Total, public, .	5,975	6,279	12,254	523	496	758	366	204	469.4	412.2	344.00
Private institutions, .	110	210	320	1 ¹	12	18	31	15	15.0	8.0	4.28
Total, public and private, . . .	6,085	6,489	12,574	522	508	776	397	219	484.4	420.2	348.28

¹ Decrease.

THE INCREASE OF THE INSANE

under care for the year was 552, compared with 508 the previous year; 484, the average annual increase for the last five years; 420, the last ten years; and 348, the last twenty-five years.

The number of nonresident insane was 74, compared with 65 the previous year; 65, the average number the last five years. Of these, 62 were patients in private institutions; 12, private patients in State hospitals.

It is the policy of the State not to receive into its institutions nonresidents, even as private patients, unless their friends are resident in Massachusetts and have just claims for such service.

THE INCREASE OF THE INSANE UNDER PUBLIC CARE

was 523, compared with 496 the previous year; 469, the average annual increase for the last five years; 412, the last ten years; and 344, the last twenty-five years.

THE DECREASE OF THE INSANE UNDER PRIVATE CARE

was 1, compared with an increase of 12 the previous year; 15, the average annual increase for the last five years; 8, the last ten years; and 4, the last twenty-five years.

In addition to the insane, there were in private institutions 66 other patients, compared with 72 the previous year. Of these, 13 were sane voluntary mental patients and 53 voluntary nonmental patients. One of these was in the McLean Hospital, where 29.22 per cent of all patients were under the voluntary relation, without commitment as insane.

THE INCREASE OF THE INSANE IN FAMILY CARE

was 34, compared with a decrease of 3 the previous year; 4, the average annual increase for the last five years; 15, the last ten years; and 11, the last twenty-five years.

THE INCREASE OF THE INSANE IN PUBLIC INSTITUTIONS

was 489, compared with 499 the previous year; 465, the average annual increase for the last five years; 397, the last ten years; and 333, the last twenty-five years.

ALL ADMISSIONS OF MENTAL PATIENTS

from the community, to public institutions and McLean Hospital, were 3,254, compared with 3,096 the previous year, and 3,047, the average the last five years. The increase this year was 158, compared with a decrease of 99 the previous year, and 68, the average increase the last five years.

They comprise court commitments as insane, voluntary admissions of the insane and voluntary admissions of mental patients who were classed as sane.

Court commitments as insane were 3,054, compared with 2,911 the previous year, and 2,875, the average the last five years. The increase was 143, compared with a decrease of 89 the previous year, and 47, the average increase the last five years.

Voluntary admissions of the insane were 162, compared with 157 the previous year. Public institutions received 103 such patients, of whom 11, or 6.17 per cent., required subsequent commitment. McLean Hospital received 59 such patients, of whom 6, or 10.16 per cent., required subsequent commitment.

Voluntary admissions of mental patients who were classed as sane were 38, compared with 28 the previous year. Public institutions received 30 such patients, McLean Hospital, 8.

ALL VOLUNTARY ADMISSIONS

to public institutions and McLean Hospital were 200, compared with 185 the previous year, and 172, the average the last five years. The increase was 15, compared with an increase of 10 the previous year, and 22, the average increase the last five years. Public institutions received 133 such patients, compared with 95 the previous year, and 88, the average the last five years. McLean Hospital received 67 such patients, compared with 90 the previous year, and 84, the average the last five years.

EMERGENCY COMMITMENTS

numbered 87, a decrease of 46, compared with an increase of 56 the previous year, and 1, the average increase the last five years. Public institutions received 76, and McLean Hospital, 11. Eighty-four were duly committed and 3 were discharged within the five days' limit.

FIRST CASES OF INSANITY

appeared in public institutions and McLean Hospital to the number of 2,582. compared with 2,451 the previous year, and 2,403, the average the last five years. The increase was 131, compared with a decrease of 40 the previous year, and 75, the average increase the last five years.

Of all the commitments of the insane to these institutions (inclusive of insane voluntary patients), 80.29 per cent., appeared for the first time in any institution for the insane.

One insane person came under care for the first time from every 1 304 of the population of the State, compared with 1,329 the previous year, and 1,325, the average from 1905 to 1910. The estimated increase in the population of the State for the year is 108,003; hence the growth of population would have accounted for an increase of 81 in the first cases of insanity. As shown above, there was an actual increase of 131.

THE NATIVITY

of such first cases of insanity does not differ materially from the percentages of the previous year. Exclusive of 11, or .42 per cent., whose birthplaces were unknown 1,016, or 39.52 per cent., were born in Massachusetts; 1,264, or 49.16 per cent., in New England; 1,417, or 55.11 per cent., in United States; 1,154, or 44.88 per cent., in foreign countries.

THEIR PARENTAGE

also corresponds substantially with the percentages of previous years. Exclusive of 106, or 4.10 per cent., whose birthplaces were unknown, 443, or 17.89 per cent., of the mothers were born in Massachusetts; 714, or 28.83 per cent., in New England; 825, or 33.32 per cent., in the United States; 1,651, or 66.68 per cent., in foreign countries.

Exclusive of 111, or 4.29 per cent., whose birthplaces were unknown, 421, or 17.04 per cent., of the fathers were born in Massachusetts; 694, or 27.68 per cent., in New England; 808, or 32.70 per cent., in United States; 1,663, or 67.30 per cent., in foreign countries.

THEIR AGES

vary but little from the averages of previous years. The age of 60 or more had been reached by 481, or 18.67 per cent., when admitted for hospital treatment; by 393, or 16.81 per cent., when insanity began. The mean age was 42.44 years on admission; 40.03 years at the onset of mental disease.

THE LOCALITIES

where they resided at the time of commitment, and where insanity developed, in the main show that country districts furnish relatively fewer cases of insanity than the more populous centers. The cities and towns of over 10,000 inhabitants comprise 74 per cent. of the total population of the State, and country districts only 26 per cent., whereas 2,069, or 80.13 per cent., of the commitments were made from the former, and 513, or 19.87 per cent., from the latter.

THE CAUSES OF INSANITY

assigned by the physicians of the hospital were physical in 1,713, or 66.35 per cent.; mental in 152, or 5.88 per cent.; unknown in 715, or 27.69 per cent.; and not insane in .07 per cent.

Congenital causes were assigned in 8.48 per cent.; heredity alone in 7.36 per cent., with other causes, 12.63 per cent.,

making heredity a causative factor in 19.99 per cent.; alcoholic intemperance alone in 16.50 per cent., with other causes, 5.65 per cent., making alcohol a causative factor in 22.15 per cent.; senility in 9.26 per cent.; coarse brain lesions in 7.51 per cent.; syphilis in 3.91 per cent. These six causes were operative in 71.30 per cent. of this year's first cases of insanity.

THE CURABILITY OF MENTAL DISEASE

in this year's first cases of insanity is practically the same as last year, and does not vary materially from the average.

The mental disease was classed as curable in 579, or 22.42 per cent., of first cases, compared with 22.52 per cent. the previous year, and 24.06 per cent., a five years' average. The outcome in 3,376 such cases (a six-year period) indicates an expectation of recovery in 1 out of 2.21 cases.

The mental disease was classed as generally incurable in 1,004, or 38.88 per cent. The outcome in 5,141 such cases (a six-year period) indicates an expectation of recovery in 1 out of 29.71 cases.

The mental disease was classed as incurable in 893, or 34.59 per cent. The outcome in 5,201 such cases (a six-year period) indicates an expectation of recovery in 1 out of 1,300 cases.

CERTAIN FORMS OF MENTAL DISEASE

occur with great frequency; manic-depressive insanity in 13.21 per cent. of this year's first insanity and in 58.89 per cent. of the forms of mental disease classed as curable; acute alcoholic insanity in 5.93 per cent. of first cases and in 26.42 per cent. of the forms classed as curable. These two forms comprised 19.14 per cent. of first cases, compared with 19.58 per cent. the previous year, and 19.16 per cent., a five years' average. They comprised 85.31 per cent. of forms of mental disease classed as curable, compared with 86.96 per cent. the previous year, and 82.72 per cent., a five years' average. They furnished 69.38 per cent. of first recoveries, compared with 72.44 per cent. the previous year, and 75.46 per cent., a five years' average.

In the groups classed as incurable and generally incurable, dementia præcox occurred in 24.63 per cent. of first cases; chronic alcoholic insanity in 5.93 per cent.; imbecility in 5.15 per cent.; senile insanity in 10.96 per cent.; epileptic insanity in 3.72 per cent.; general paralysis in 7.51 per cent.; coarse brain lesions in 7.24 per cent. These seven forms, classed as practically incurable, comprised 65.14 per cent. of first cases, and furnished 8.84 per cent of first recoveries.

These nine forms of disease comprised 84.28 per cent. of this year's first cases of insanity, compared with 83.71 per cent. the previous year, and 83.65 per cent., a five years' average.

THE DURATION OF MENTAL DISEASE

previous to hospital treatment was less than three months in 893, or 38.34 per cent., of first cases, compared with an average of 36.28 per cent. the last five years; less than six months in 1,149, or 49.33 per cent., compared with an average of 47.28 per cent. the last five years; less than one year in 1,418, or 60.88 per cent., compared with an average of 57.83 per cent. for five years; one year or more in 911, or 39.12 per cent., compared with an average of 42.17 per cent. for five years.

The significance of the previous duration of mental disease is evident from the fact that out of 1,584 first recoveries (a six-year period), 71.72 per cent. had a previous duration less than three months; 83.27 per cent. less than six months; 90.97 per cent. less than one year; and only 9.03 per cent. one year or more; while the whole duration of insanity was less than three months in 26.51 per cent.; less than six months in 52.46 per cent.; less than one year in 76.38 per cent.; and one year or more in only 23.61 per cent. These percentages have been substantially constant for the last six years.

DISCHARGES.

THE RESULTS OF MENTAL DISEASE

are shown in the condition of patients on discharge: 407 recovered, 310 were capable of self-support, 363 were improved, and 340 not improved.

THE RECOVERY RATE

for the whole State was 13.16 per cent. of commitments, compared with 12.60 per cent. the previous year, and 13.82 per cent., a five years' average.

The percentages of recoveries in public institutions and McLean Hospital were: —

Of commitments (inclusive of insane voluntary), . . .	12.66; last four years' average, 12.85
Of whole number of persons, . .	2.71; last four years' average, 2.86
Of daily average number, . . .	3.42; last four years' average, 3.61

There were 294 recoveries of first cases of insanity, being 11.39 per cent. of such, compared with 10.81 per cent. the previous year, and 11.49 per cent., the average the last four years.

There were discharged,

CAPABLE OF SELF-SUPPORT

310, or 9.63 per cent. of the commitments, compared with 9.35 per cent. the previous year.

THE RESTORATION OF THE INSANE

for the whole State to self-support in the community includes both the recovered and those discharged capable of self-support. Together they numbered 761 this year.

The percentages of both these classes in public institutions and McLean Hospital were: —

Of commitments (inclusive of insane voluntary), . . .	22.29; last five years' average, 21.98
Of whole number of persons, . .	4.77; last five years' average, 4.76
Of daily average number, . . .	6.01; last five years' average, 6.10

DEATHS.

THE DEATH-RATE OF THE INSANE

for the whole State during the year was 78.7 per thousand of the whole number of persons treated, compared with 78.6 the previous year, and 81.1, a five years' average.

The percentages of deaths in public institutions and McLean Hospital were:—

Of whole number of persons,	. 7.96; last two years' average, 7.96
Of daily average number, .	. 10.03; last two years' average, 9.97
Of discharges and deaths, .	. 45.70; last two years' average, 46.54

Mental disease classed as curable was present in 10.13 per cent. of persons who died, compared with 9.73 the previous year.

The percentage of deaths of first cases occurring within the first three months of hospital residence was 28.09, against 29.45 in 1909, 29.39 in 1908, 29.68 in 1907, and 28.52 in 1906.

Senile insanity was present in 23.51 per cent., general paralysis in 18.24 per cent., and coarse brain lesions in 11.80 per cent.

These incurable brain conditions existed in 53.55 per cent., compared with 46.06 per cent. the previous year.

Tuberculosis was present in 9.46 per cent., compared with 10.55 per cent. the previous year.

Pneumonia (lobar, broncho and hypostatic) was present in 19.16 per cent., organic disease of the heart in 12.97 per cent., organic disease of the kidneys in 3.35 per cent., and malignant tumors in 1.92 per cent.

THE FEEBLE-MINDED.

THE WHOLE NUMBER OF THE FEEBLE-MINDED under care Oct. 1, 1910, was 1,846, being 1 feeble-minded person to every 1,824 of the population of the State. There were enumerated in the State census of 1905, 2,778 feeble-minded persons, of whom 1,287 were living in the community. This figure is far below the actual number in the State, an accurate enumeration of which is not possible.

The feeble-minded appear under care in institutions and almshouses, and under private care in private institutions. Their number and increase in these locations for the year and the last five years are shown as follows:—

	NUMBER OCT. 1, 1910.			INCREASE OVER PREVIOUS YEARS.					Average Increase, Five Years.
	Males.	Females.	Totals.	1910.	1909.	1908.	1907.	1906.	
School for the Feeble-minded at Waltham.	801	552	1,353	48 ¹	118	65	98	92	65.0
Wrentham School,	114	100	214	172	7 ¹	39	10	—	42.8
Hospital Cottages for Children, .	6	11	17	2	1 ¹	1 ¹	—	2	.4
Almshouses,	107	92	199	17 ¹	23	7	5 ¹	35 ¹	5.4 ¹
Total, public,	1,028	755	1,783	109	133	110	103	59	102.8
Elm Hill,	40	13	53	5 ¹	—	2 ¹	1	3 ¹	1.8 ¹
Terrace Home School,	6	4	10	10	—	—	—	—	2.0
Total, public and private, .	1,074	772	1,846	114	133	108	104	56	103.0

¹ Decrease.

THE INCREASE OF THE FEEBLE-MINDED

under care for the year was 114, compared with 133 the previous year, and 103, the average the last five years.

The number of nonresident feeble-minded was 74, compared with 83 the previous year. Of these, 36 were patients in private institutions; 38, private patients in State institutions.

It is the policy of the State to receive feeble-minded persons from other States only when there is no school for the feeble-minded in such States, and then only in urgent cases. The nonresident patients are paid for at a rate which fully compensates the State for the cost of their maintenance.

The increase of the feeble-minded under public care was 109, compared with 133 the previous year, and 102.8, the average, the last five years.

The increase of the feeble-minded in public institutions was 126, compared with 110 the previous year, and 108, the average the last five years.

The increase of the feeble-minded in public institutions is in no sense an index of the increase of feeble-mindedness in the State. It is directly dependent upon the extent of public provision, inasmuch as there are hundreds of such children in urgent need of care who are now living in their homes and elsewhere in the community, but would appear in institutions

if adequate accommodation were available for them. Their apparent rapid increase in recent years is due to the policy which the State has pursued, and still has need to continue, of progressively extending provision for this class. Public provision for the feeble-minded has more than doubled during the last seven years. Provision for additional patients was made this year at Wrentham.

The State should add on the average 100 beds a year as the minimum requirement for such persons.

THE EPILEPTIC.

THE WHOLE NUMBER OF THE EPILEPTIC

under care Oct. 1, 1910, was 1,357, being 1 epileptic to every 2,481 of the population of the State. There were enumerated in the State census of 1905, 2,140 epileptics, of whom 1,016 were living in the community. This figure is probably far below the actual number in the State if an accurate enumeration could be made.

The epileptic appear under public care in the Monson State Hospital, the State hospitals and asylums, and other public institutions, and under private care in private institutions. Details will be found under the Monson State Hospital.

Their number and increase in these locations for the year and for the last five years are shown as follows:—

	NUMBER OCT. 1, 1910.			INCREASE OVER PREVIOUS YEARS.					Average Increase, Five Years.
	Males.	Females.	Totals.	1910.	1909.	1908.	1907.	1906.	
Monson Hospital,	395	375	770	75	8	117	39	10	49.8
State hospitals and asylums,	270	171	441	—	45	14	1	23	16.6
Other public institutions,	81	51	132	7	22	55 ¹	4 ¹	12 ¹	8.4 ¹
Total, public,	746	597	1,343	82	75	76	36	21	58.0
Private institutions,	5	9	14	—	2	2 ¹	2	1 ¹	.2
Total, public and private,	751	606	1,357	82	77	74	38	20	58.2

¹ Decrease.

In addition, the overseers of the poor report (March 31, 1910) 30 epileptics in city and town almshouses.

THE INCREASE OF THE EPILEPTIC

under care for the year was 82, compared with 77 the previous year, and 58, the average the last five years.

The increase of the epileptic under public care was 82, compared with 75 the previous year, and 58, the average the last five years.

The numbers under private care were the same as for Oct. 1, 1909, compared with an increase of 2 the previous year.

The increase of the epileptic under public care, like that of the feeble-minded, does not represent the rate of increase in the frequency of occurrence of epilepsy. They are coming under public supervision in greater numbers, probably because of the establishment of a special hospital for them.

It would be wise to continue the recent policy of progressive enlargement of accommodation for this class, especially for children. The experience of the Hospital Cottages for Children, where the average age at admission is about ten years, shows that about 1 in 10 recovers or ceases to have epileptic seizures for a considerable period, whereas adult epileptics have rarely recovered after their admission to the Monson State Hospital.

THE INEBRIATES.

THE WHOLE NUMBER OF INEBRIATES

under hospital care Oct. 1, 1910, was 146, being 1 inebriate to every 23,058 of the population of the State. This number comprises only a very small fraction of the whole number of inebriates, there being some 20,000 commitments annually to penal institutions, and some 7,000 persons committed for the first time.

It is the intention to exclude from hospital care criminal inebriates and those who are not of good character and reputation, apart from habits of inebriety.

The State provides a special hospital for the treatment of male inebriates, but women are excluded therefrom, and continue to be committed as inebriates to State hospitals for the

insane. The private institutions receive only a few such patients.

Their number and distribution in these locations Oct. 1, 1910, are shown as follows:—

	NUMBER OCT. 1, 1910.			INCREASE OVER PREVIOUS YEARS.					Average Decrease, Five Years.
	Males.	Females.	Totals.	1910.	1909.	1908.	1907.	1906.	
Foxborough Hospital, . . .	109	—	109	17	5	3 ¹	19 ¹	44 ¹	8.8 ¹
State hospitals,	—	35	35	5	6	9	7 ¹	7	4.0
Total, public,	109	35	144	22	11	6	26 ¹	37 ¹	4.8 ¹
Private institutions, . . .	2	—	2	2 ¹	—	2	3 ¹	3	—
Total, public and private, .	111	35	146	20	11	8	29 ¹	34 ¹	4.8 ¹

¹ Decrease.

THE INCREASE OF THE INEBRIATES

under hospital care was 20, compared with an increase of 11 the previous year, and an average decrease of 4.8 the last five years.

The increase of the inebriates under public care was 22, compared with an increase of 11 the previous year, and an average decrease of 4.8 the last five years.

The number under private care shows little variation.

Further details in regard to inebriates will be found under Foxborough State Hospital and in Table No. 1.

THE PUBLIC INSTITUTIONS.

WORCESTER STATE HOSPITAL.

Opened in January, 1833. Present capacity, 1,301; decrease for the year, 4.

Valuation of the plant, per capita of capacity, \$1,636; real estate, \$1,467; personal, \$169.

Daily average number of patients, 1,354; increase for the year, 122.

Number Oct. 1, 1910, 1,384.

All commitments, 577; increase for the year, 82.

Commitments as insane, 568; increase for the year, 87.

First cases of insanity, 462; 81.34 per cent.

Voluntary admissions, 1.

Emergency commitments, 7.

Commitments as inebriate, 9 women.

First Cases of Insanity.

Native-born patients, 44.44 per cent.; mothers, 26.26 per cent.; fathers, 23.29 per cent.

Age sixty years or over, 15.87 per cent.

Resident in cities or large towns, 82.03 per cent.; country districts, 17.97 per cent.

Previous duration of insanity, under six months, 43.74 per cent.

Curable forms of insanity, 17.97 per cent.

Causes: congenital, 16.23 per cent.; hereditary, 24.02 per cent.; alcoholic, 25.76 per cent.; senility, 8.23 per cent.; coarse brain lesions, 6.93 per cent.; syphilis, 6.71 per cent.

Recoveries of the Insane.

Whole number, 60; 10.56 per cent. of commitments.

Recoveries of first cases of insanity, 39; 8.44 per cent. of first cases.

Recoveries in curable group A, 38; 45.78 per cent. of such curable cases.

Deaths of the Insane.

Whole number, 178; 9.58 per cent. of whole number of persons treated.

Curable forms of mental disease present in 9.55 per cent.; tuberculosis in 2.81 per cent.; senile insanity in 21.91 per cent.; general paralysis in 28.65 per cent.; coarse brain lesions in 11.80 per cent.

Finances.

Expenditures from maintenance funds, \$298,373; total receipts, \$73,487; being \$45,203 from private patients, \$20,387 from reimbursing patients, \$7,897 from other sources.

Weekly per capita cost of maintenance computed on net expenses, \$4.08; the same less repairs and improvements, \$3.62.

Weekly per capita cost of whole service, \$1.55; ward service, \$0.57.

One person employed for every 4.85 patients; 1 nurse for every 10.10 patients.

Average monthly wage for all persons employed, \$32.67; for nurses, \$24.78; men, \$26.04; women, \$23.58.

Extract from Superintendent's Annual Report.

The training school for nurses will begin its winter session with a class of 75 juniors, the largest in its history, and in December 12 nurses will be graduated. Of last year's graduates, some are engaged in private nursing, others are taking post-graduate work in other hospitals, and 1 nurse has returned to us to take charge of the infirmary wards.

The nurses and attendants are working on a sixty-hour basis, with one day off in seven. While we have had to increase our nursing force, we have experienced less trouble in obtaining suitable persons than in other years.

Our new ward for women is now fully occupied and is proving itself well adapted to the needs of the class of patients for whom it was designed, that is, for those of our patients who need more individual attention, either on account of their disturbed or their feeble condition, and who cannot be cared for in our infirmary wards. The continuous baths installed on the lower floor are in daily use, and have proved very efficient as a means of allaying excitement, both acute and chronic; while the verandas, open at all times and allowing the patients free access to the open air, are much appreciated. The roof of this building is now enclosed and ready for occupancy, and will prove, I have no doubt, a very attractive and useful feature of the hospital. To make it more convenient of access from the other wards, and safer in case of fire, a second iron stair is being added.

TAUNTON STATE HOSPITAL.

Opened in April, 1854. Present capacity, 930; increase for the year, 6.

Valuation of plant, per capita of capacity, \$908; real estate, \$784; personal, \$124.

Daily average number of patients. 986; increase for the year, 19.

Number Oct. 1, 1910, 1,011.

All commitments, 487; increase for the year, 23.
Commitments as insane, 481; increase for year, 20.
First cases of insanity, 380; 79 per cent.
Voluntary admissions, 11.
Emergency commitments, 2.
Commitments as inebriate, 2 women.

First Cases of Insanity.

Native-born patients, 53.72 per cent.; mothers, 35.67 per cent.; fathers, 35.14 per cent.

Age sixty years or over, 22.69 per cent.

Resident in cities or large towns, 67.11 per cent.; country districts, 32.89 per cent.

Previous duration of insanity, under six months. 44.32 per cent.

Curable forms of insanity, 17.37 per cent.

Causes: congenital, 4.74 per cent.; hereditary, 17.11 per cent.; alcoholic, 26.84 per cent.; senility, 17.63 per cent.; coarse brain lesions. 3.16 per cent.; syphilis, .79 per cent.

Recoveries of the Insane.

Whole number, 59; 12.27 per cent. of commitments.

Recoveries of first cases of insanity, 45; 11.84 per cent. of first cases.

Recoveries in curable group A, 38; 57.58 per cent. of such curable cases.

Deaths of the Insane.

Whole number, 148; 9.99 per cent. of whole number of persons treated.

Curable forms of mental disease present in 10.14 per cent.; tuberculosis in 2.70 per cent.; senile insanity in 36.49 per cent.; general paralysis in 19.59 per cent.; coarse brain lesions in 9.46 per cent.

Finances.

Expenditures from maintenance funds, \$235,999; total receipts, \$39,180; being \$23,742 from private patients. \$13,834 from reimbursing patients, \$1,604 from other sources.

Weekly per capita cost of maintenance computed on net expenses, \$4.64; the same less repairs and improvements, \$4.38.

Weekly per capita cost of whole service, \$1.97; ward service, \$0.84.

One person employed for every 3.95 patients; 1 nurse for every 7.44 patients.

Average monthly wage for all persons employed, \$33.71; for nurses, \$26.96; men, \$29.43; women, \$24.75.

Extract from Superintendent's Annual Report.

During the year, 964 patients — 593 men and 371 women — have been employed in some way useful to the hospital and themselves. Of this number, 235 have been employed in ward work only, and 729 in other employments. The daily average number employed was about 620, — 390 men and 230 women; of these, 924 — 150 men and 90 women — were employed at ward work only, and 380 — 235 men and 145 women — at other occupations. The industries carried on by men exclusively are the same as described in last year's report; but the out-of-door work has been more varied and much more in quantity than usual, the necessary excavation for our new sewer, now completed, requiring the labor of many men for months.

Last year it was stated that a beginning had been made in the employment of some of the women patients in suitable out-of-door labor. This work has been extended, and the number of patients employed has been increased. Women patients this year gathered all greens, peas and beans, and picked all berries on the home farm, besides preparing all vegetables for cooking. This out-of-door work does not appear in statistics, as it was done for the most part by volunteers who were engaged in other occupations, but found more relaxation and recreation in these pleasant out-of-door occupations than in the conventional and rather stiff walk, which we still make use of, for want of better.

The output of our sewing room for many years has been unsatisfactory, and, while many explanations were offered that partially explained the condition, the conclusion was forced upon us that we had been working on wrong principles to obtain the best results. To test the correctness of this conclusion, a radical change was made. The sewing room was closed, the sewing machines distributed on selected wards, and the direction of the work given to the nurses, under the direction of the medical staff. One employee takes charge of the stock, gives out the needed materials, receives the completed work and does part of the cutting. One of our principles is, that all work should be done in the manner most natural to the doer. It is natural for men to go to the field and the shop; but women do their work, however

varied it may be, at home. The results of the experiment have been to our satisfaction. The work done has been more in quantity and better in quality than before. Before the end of the year it became necessary to increase the variety of work, to avoid having willing hands idle. Considerable work has accordingly been done for the tailor shop, stockings knit for men, and the making of drawn rugs has been commenced. We hope gradually to introduce handicraft work of various kinds.

The more disturbed chronic patients are also markedly improved by suitable employment. Last summer, when working on the sewer, we employed many patients of this class in excavating, and since then in shoveling coal, and they have been quieter, more tractable and less inclined to be quarrelsome when so employed. We have also introduced some employments on Ward 7, on the women's side, which is devoted to the care of the more disturbed women patients of the chronic type, with some success. All our bed ticks are now made and all curled hair picked on this ward. Therefore, while we cannot claim great results, we feel that we have made a beginning. It may be interesting as well as instructive in this connection to note that to make use of employment as a curative agent has been the practice of this hospital from the first, and has been advocated by each and every superintendent. The main principles were established as long ago as 1876, as indicated by the report for that year; and, while the system then in vogue has been to some extent modified by time and circumstances, the underlying principles have in the main remained unchanged and are still in force. They are as follows: —

1. All patients who are physically able should be interested in some suitable employment as soon as the acute symptoms of their mental disorders have subsided.
2. Effort should be made to provide employment that is best adapted in kind and amount to the condition and needs of the individual patient.
3. Occupations should be restricted for the most part to those of direct value to the hospital, regarded as a co-operative community.
4. Parole should be granted to suitable able-bodied patients who are able to work.

Although hospitals are often criticised for not employing a higher grade of employees, the fact remains that they try to get the best they can, and the further fact that the material as a whole is not unpromising. Speaking for this hospital only, the material averages very well, being made up mostly of young men and women from the country. What they need is training or education. Until the establishment of training schools, what training or education they received was obtained in a haphazard way, and even to-day only a small fraction are training in the school. Systematic training is necessary to teach these young people how to perform their duties properly in this hospital, and in no way can it be accomplished except in the school. This year all women attendants are required to take the full course; and all men attendants are

instructed in the school on practical subjects, while a larger number of men are taking the full course than for several years.

The Raynham farm continues to prove itself a most valuable adjunct to the hospital. Its normal capacity is 72 patients. During the past five years 103 patients have been cared for there; of these, only 7 have escaped during that same period. Of course no patient is sent there who is known to be liable to run away, or kept there after showing such tendency. On the other hand, there are no bars or guards of any kind on the windows, most of the patients go about unattended, and any one seriously disposed to escape can easily do so. The patients there as a rule keep healthy and happy, showing evidence of the beneficial effect of fresh air, wholesome employment and liberty. Extension of the colony is planned for some time in the near future.

NORTHAMPTON STATE HOSPITAL.

Opened in August, 1858. Present capacity, 818.

Valuation of plant, per capita of capacity, \$1,111; real estate, \$998; personal, \$113.

Daily average number of patients, 852; increase for the year, 4.

Number Oct. 1, 1910, 855.

All commitments, 336; increase for the year, 52.

Commitments as insane, 330; increase for the year, 48.

First cases of insanity, 264; 80 per cent.

Voluntary admissions, 17.

Emergency commitments, 2.

Commitments as inebriate, none.

First Cases of Insanity.

Native-born patients, 56.82 per cent.; mothers, 37.64 per cent.; fathers, 33.97 per cent.

Age sixty years or over, 22.73 per cent.

Resident in cities or large towns, 79.17 per cent.; country districts, 20.83 per cent.

Previous duration of insanity, under six months, 49.81 per cent.

Curable forms of insanity, 24.62 per cent.

Causes: congenital, 11.74 per cent.; hereditary, 26.89 per cent.; alcoholic, 34.09 per cent.; senility, 13.26 per cent.; coarse brain lesions, 7.95 per cent.; syphilis, 1.52 per cent.

Recoveries of the Insane.

Whole number, 33; 10 per cent. of commitments.

Recoveries of first cases of insanity, 27; 10.23 per cent. of first cases.

Recoveries in curable group A, 23; 35.38 per cent. of such curable cases.

Deaths of the Insane.

Whole number, 87; 7.12 per cent. of whole number of persons treated.

Curable forms of mental disease present in 8.05 per cent.; tuberculosis in 4.60 per cent.; senile insanity in 42.53 per cent.; general paralysis in 14.94 per cent.; coarse brain lesions in 12.64 per cent.

Finances.

Expenditures from maintenance funds, \$171,313; total receipts, \$51,389; being \$33,665 from private patients, \$14,799 from reimbursing patients, \$2,925 from other sources.

Weekly per capita cost of maintenance computed on net expenses, \$3.82; the same less repairs and improvements, \$3.47.

Weekly per capita cost of whole service, \$1.46; ward service, \$0.53.

One person employed for every 5.80 patients; 1 nurse for every 12.04 patients.

Average monthly wage for all persons employed, \$36.66; for nurses, \$27.85; men, \$30.01; women, \$25.85.

Extract from Superintendent's Annual Report.

Inasmuch as many of our patients leave the hospital for a trial visit at home before they have fully recovered, our sense of responsibility does not end with their departure from the hospital. They are encouraged to write us freely for advice whenever they feel need of it, or to visit us at the hospital; and are requested to send a written report of their condition before they are finally discharged.

It is so obviously the duty of the hospital to help its patients to keep well after their discharge that it would seem appropriate and advisable, as a measure of prevention, for one of the hospital physicians to see, in consultation with the family physician, at no expense to the patient, not only cases that are likely to be committed to the hospital, but any case where the question of hospital treatment is being considered. This

would entail added expense to the hospital, and would probably require an additional member on the hospital staff; but the good to the community and the final saving to the State might more than offset the expense incurred. We have done a little along this line for years, having seen and advised, without charge, any patient, or his friends or physician, who has been willing to come to the hospital for that purpose. Sometimes a course of treatment can be advised that will enable a patient to be cared for at home who otherwise would have to be committed to the hospital. On the other hand, it is occasionally possible to persuade a patient to accept early hospital treatment with prospect of speedier recovery than if commitment had been delayed.

A large measure of success is due to intelligent nursing. Our training schools are thus doing excellent work. Unfortunately, the number of nurses we can secure is too small for our needs. There are so many State and city institutions and private hospitals needing nurses that the demand always exceeds the supply, especially in these days of plentiful opportunities for obtaining work of a more agreeable nature than caring for patients in a State institution.

Patients have been kept busily employed in the various departments of the hospital. It is considered advisable, as beneficial to the patient, that every one physically able shall have some form of employment. For those not strong physically, this may be limited to the care of each one's bed room, to sweeping or dusting the corridors, washing dishes and like work. The stronger patients are employed in the kitchen, laundry, sewing rooms, at the shops and on the farm. Out-of-door work is undoubtedly best suited to the largest number. Gardening, farm work and grading, under the direction of an employee, do not entail mental effort; they easily divert the minds of the patients and tend to improve the physical condition. The male patients have always helped on the farm, in large numbers. Now the women are working out in increasing numbers, picking strawberries, raspberries, blackberries, currants and peas; and for two or three years a few of them have had plots of ground to cultivate. This has added greatly to their pleasure and contentment. They select for themselves what they wish to raise, flowers or vegetables. The latter they use on their own tables as salads and relishes. Pickles and preserves are made for winter use. The women knit mittens, shoulder capes, caps and bedroom slippers, to be used on the Christmas tree as gifts for other patients.

Many repairs are needed every year in an institution as old as this. Each employee engaged in making these repairs has one or more patients as helpers. Patients have painted the walls and ceilings in the male department; have caned the seats of chairs and mended broken furniture; repaired boots and shoes; have made all the new mattresses and remade old ones. All of the tin ware used in the hospital is made by one of the patients. The grounds to the west and north of the infirmary for men have been graded by the patients, and they have helped

in laying cement walks near the kitchen and laundry. A new cement walk, 1,850 feet in length, has been laid along the highway from the bridge on West Street to the entrance to our grounds at the top of the hill. The city of Northampton laid half of this and the hospital the rest. The part built by the hospital was done largely with patients' help.

DANVERS STATE HOSPITAL.

Opened in May, 1878. Present capacity, 1,360.

Valuation of plant, per capita of capacity, \$1,343; real estate, \$1,257; personal, \$86.

Daily average number of patients, 1,414; decrease for the year, 24.

Number Oct. 1, 1910, 1,483.

All commitments, 530; decrease for the year, 131.

Commitments as insane, 519; decrease for the year, 139.

First cases of insanity, 427; 82.27 per cent.

Voluntary admissions, 10.

Emergency commitments, 3.

Commitments as inebriate, 7 women.

First Cases of Insanity.

Native-born patients, 55.97 per cent.; mothers, 34.13 per cent.; fathers, 35.34 per cent.

Age sixty years or over, 17.88 per cent.

Resident in cities or large towns, 88.06 per cent.; country districts, 11.94 per cent.

Previous duration of insanity, under six months, 41.19 per cent.

Curable forms of insanity, 18.74 per cent.

Causes: congenital, 9.13 per cent.; hereditary, 16.40 per cent.; alcoholic, 19.44 per cent.; senility, 2.34 per cent.; coarse brain lesions, 11.94 per cent.; syphilis, 6.32 per cent.

Recoveries of the Insane.

Whole number, 59; 11.37 per cent. of commitments.

Recoveries of first cases of insanity, 41; 9.60 per cent. of first cases.

Recoveries in curable group A, 34; 42.50 per cent. of such curable cases.

Deaths of the Insane.

Whole number, 207; 10.53 per cent. of whole number of persons treated.

Curable forms of mental disease present in 9.66 per cent.; tuberculosis in 8.70 per cent.; senile insanity in 10.14 per cent.; general paralysis in 23.19 per cent.; coarse brain lesions in 23.19 per cent.

Finances.

Expenditures from maintenance funds, \$320,498; total receipts, \$64,717; being \$38,656 from private patients, \$22,722 from reimbursing patients, \$3,339 from other sources.

Weekly per capita cost of maintenance computed on net expenses, \$4.27; the same less repairs and improvements, \$3.51.

Weekly per capita cost of whole service, \$1.67; ward service, \$0.54.

One person employed for every 5.36 patients; 1 nurse for every 11.01 patients.

Average monthly wage for all persons employed, \$38.74; for nurses, \$25.56; men, \$27.96; women, \$23.85.

Extract from Superintendent's Annual Report.

The daily staff meetings, which were inaugurated at this hospital twelve years ago, have been extended in their scope so that not only new admissions, but matters of general policy and all requests for discharge of patients are considered by the staff before action is taken. In a report of this character it is impossible to give any detailed account of the clinical work which has to be done regularly and systematically to secure results of any value.

The ratio of graduates to the number of nurses shows too plainly the difficulty experienced in keeping an adequate nursing force. The ideal nurse, like other realized ideals, is rare. She must be the product of hospital training. In the early days of her service, the conditions under which she is to be trained must be sufficiently attractive to induce her to continue the training. Then to the suitable and well-trained nurse sufficient inducement must be offered to keep her in the service. Tact, patience, good humor and active interest in duties cannot be exhibited continuously to the highest possible degree by nurses who are in hourly contact with the insane from early morning until late in the evening,

six days a week, without any respite from responsibilities, even at meal times. I recommend the employment of a sufficient number of nurses and attendants to materially reduce the number of hours' weekly work hitherto required.

WESTBOROUGH STATE HOSPITAL.

Opened in December, 1886. Present capacity, 1,045; increase for the year, 64.

Valuation of plant, per capita of capacity, \$968; real estate, \$855; personal, \$113.

Daily average number of patients, 1,030; increase for the year, 73.

Number Oct. 1, 1910, 1,041.

All commitments, 534; increase for the year, 17.

Commitments as insane, 491; increase for the year, 14.

First cases of insanity, 371; 75.56 per cent.

Voluntary admissions, 84.

Emergency commitments, 13.

Commitments as inebriate, 20 women.

First Cases of Insanity.

Native-born patients, 62.87 per cent.; mothers, 41.50 per cent.; fathers, 42.62 per cent.

Age sixty years or over, 19.41 per cent.

Resident in cities or large towns, 69.81 per cent.; country districts, 30.19 per cent.

Previous duration of insanity, under six months, 65.34 per cent.

Curable forms of insanity, 29.65 per cent.

Causes: congenital, 5.39 per cent.; hereditary, 24.79 per cent.; alcoholic, 11.05 per cent.; senility, 9.16 per cent.; coarse brain lesions, 9.43 per cent.; syphilis, 3.23 per cent.

Recoveries of the Insane.

Whole number, 103; 20.98 per cent. of commitments.

Recoveries of first cases of insanity, 76; 20.49 per cent. of first cases.

Recoveries in curable group A, 51; 46.36 per cent. of such curable cases.

Deaths of the Insane.

Whole number, 110; 7.29 per cent. of whole number of persons treated.

Curable forms of mental disease present in 11.82 per cent.; tuberculosis in 10.91 per cent.; senile insanity in 27.27 per cent.; general paralysis in 20 per cent.; coarse brain lesions in 13.64 per cent.

Finances.

Expenditures from maintenance funds, \$269,995; total receipts, \$78,260; being \$59,630 from private patients, \$14,483 from reimbursing patients, \$4,147 from other sources.

Weekly per capita cost of maintenance computed on net expenses, \$4.93; the same less repairs and improvements, \$4.50.

Weekly per capita cost of whole service, \$2.23; ward service, \$0.91.

One person employed for every 3.52 patients; 1 nurse for every 6.51 patients.

Average monthly wage for all persons employed, \$34; for nurses, \$25.58; men, \$28.93; women, \$23.45.

Extract from Trustees' Annual Report.

There have been some necessary changes in the personnel of the staff which have been referred to in the report of the superintendent, and which have received the approval of the trustees. The salaries of three of the staff physicians have been raised, in recognition of faithful and efficient service. This is necessary in order to maintain the medical efficiency of the staff. The compensation paid the members of the State hospital staffs in the various institutions is miserably insufficient for the labor and responsibility involved. Here there are no eight hours of work and sixteen hours for loafing and sleep, but twelve to sixteen hours of work and twenty-four hours of responsibility out of the twenty-four; and yet in many instances the compensation is less than that paid head engineers, bakers, farmers, laundresses, etc., in these institutions. The practical result is that it is becoming more and more difficult to fill satisfactorily vacancies on the staff, and more difficult each year to retain services when they have really become of value. It is a poor policy of the Commonwealth to conduct their State hospitals as kindergartens for the education of physicians, who, as soon as they are developed along these special lines enough to be of value, receive strong financial inducements to go to similar work in other States, where the compensation is not niggardly.

Extract from Superintendent's Annual Report.

The number of voluntary admissions for the year is 89,—22 more than the previous year. Other applications for voluntary admission were received, but were not considered suitable cases,—only those appearing to understand their written application being received. There is a desire on the part of some people to avoid the trouble and perhaps the publicity of a court commitment, and we are asked to receive as voluntary cases those who are not suitable. My personal opinion is that the chief benefit of the law should be to secure early treatment for those who would not be committed until perhaps the hope of recovery is doubtful.

The completion and occupation, in the past summer, of the building for disturbed women provide accommodations for the segregation of all recent cases of both sexes. Excellent results have been derived from the use of the large upper veranda, which is occupied by 25 patients both day and night. A patient who is noisy in a room or dormitory rarely continues so when out in the fresh air. The increased facilities for the continuous baths are also very satisfactory.

BOSTON STATE HOSPITAL.

Opened in December, 1839. Present capacity, 760; increase for the year, 16.

Valuation of plant, per capita of capacity, \$1,629; real estate, \$1,498; personal, \$131.

Daily average number of patients, 816; increase for the year, 46.

Number Oct. 1, 1910, 861.

All commitments, 517; increase for the year, 182.

Commitments as insane, 407; increase for the year, 73.

First cases of insanity, 330; 81.08 per cent.

Voluntary admissions, 10.

Emergency commitments, 49.

Commitments as inebriate, none.

First Cases of Insanity.

Native-born patients, 49.70 per cent.; mothers, 20.62 per cent.; fathers, 19.33 per cent.

Age sixty years or over, 24.55 per cent.

Resident in cities or large towns, 98.79 per cent.; country districts, 1.21 per cent.

Previous duration of insanity, under six months, 50.96 per cent.

Curable forms of insanity, 28.79 per cent.

Causes: congenital, 3.03 per cent.; hereditary, 7.88 per cent.; alcoholic, 13.94 per cent.; senility, 15.45 per cent.; coarse brain lesions, 5.76 per cent.; syphilis, 3.03 per cent.

Recoveries of the Insane.

Whole number, 43; 10.56 per cent. of commitments.

Recoveries of first cases of insanity, 27; 8.18 per cent. of first cases.

Recoveries in curable group A, 27; 28.42 per cent. of such curable cases.

Deaths of the Insane.

Whole number, 153; 12.60 per cent. of whole number of persons treated.

Curable forms of mental disease present in 12.42 per cent.; tuberculosis in 4.58 per cent.; senile insanity in 42.48 per cent.; general paralysis in 22.88 per cent.; coarse brain lesions in 9.15 per cent.

Finances.

Expenditures from maintenance funds, \$213,545; total receipts, \$27,717; being \$18,896 from private patients, \$6,574 from reimbursing patients, \$2,247 from other sources.

Weekly per capita cost of maintenance computed on net expenses, \$4.91; the same less repairs and improvements, \$4.56.

Weekly per capita cost of whole service, \$2.14; ward service, \$0.88.

One person employed for every 3.94 patients; 1 nurse for every 6.87 patients.

Average monthly wage for all persons employed, \$36.67; for nurses, \$26.18; men, \$28.28; women, \$24.93.

Extract from Superintendent's Annual Report.

Temporary Care Service.—The last Legislature passed a measure (chapter 307, Acts of 1910) which directed that suitable quarters be set apart at this hospital for the observation and temporary care, pending examination and commitment, of persons suffering from mental dis-

orders who should come under the care of the police in the city of Boston. In compliance with this direction the Butler building, containing two wards, each with a capacity for 10 patients, was emptied by transfer of that number to other wards, and on May 1 was ready for the reception of these cases, — one ward for men and one for women.

This wise and humane provision for immediate beginning of a portion of the service which the Psychopathic Hospital will render to the community has met an urgent need, and has been of incalculable benefit to a large number of sick persons who would otherwise have been, of necessity, confined in a police station or jail for a longer or shorter period, awaiting commitment and transfer. Under authority of the above enactment such patients are now brought directly to the hospital at any hour of the day or night, and receive at once the care and treatment their condition demands. With willing and intelligent co-operation on the part of the police department, this method has worked smoothly, and in only a few instances have we felt called upon to reject as unsuitable cases the patients who were presented. After an experience of seven months, covering the reception of nearly 200 cases, there can be no doubt that the prompt relief thus afforded operates to cut short incipient attacks, to moderate others and to shorten the period of treatment necessary in a large proportion, besides protecting the patients from needless suffering and distress.

Some statistics of this service are included in Table No. 1, to be found elsewhere in this report, but a more satisfactory review of its operations for the seven months to December 1 is presented in the following tabulation: —

	Males.	Females.	Totals.
Admissions from May 1 to Dec. 1, 1910,	115	83	198
Chapter 504, Acts of 1909, section 34,	—	1	1
Chapter 504, Acts of 1909, section 42,	4	4	8
Chapter 504, Acts of 1909, section 43,	3	3	6
Chapter 504, Acts of 1909, section 44,	5	11	16
Chapter 307, Acts of 1910,	103	64	167
Discharges from May 1 to Dec. 1, 1910,	113	79	192
Recovered,	22	8	30
Improved,	5	2	7
Unimproved,	2	—	2
Died,	—	2	2
Not insane,	3	8	11
Deported,	2	—	2
Committed to Boston State Hospital,	31	37	68
Committed to Danvers State Hospital,	23	10	33
Committed to Worcester State Hospital,	6	4	10
Committed to Westborough State Hospital,	9	4	13
Committed to Taunton State Hospital,	1	1	2
Committed to Monson State Hospital,	1	—	1
Committed to McLean Hospital,	1	—	1
Committed to Butler Hospital, Providence, R. I.,	1	—	1
Returned to Boston State Hospital,	1	—	1
Returned to Medfield State Asylum,	2	—	2
Returned to Worcester State Hospital,	2	1	3
Returned to Westborough State Hospital,	1	1	2
Returned to Monson State Hospital,	—	1	1
Patients remaining Dec. 1, 1910,	2	4	6

Provisional Diagnosis in Temporary Care Cases.

	Males.	Females.	Totals.
Admissions from May 1 to Dec. 1, 1910,	115	83	198
Senile psychoses,	3	3	6
General paralysis,	20	4	24
Cerebral thrombosis,	—	1	1
Cerebral concussion,	1	—	1
Alcoholic psychoses: —			
Pathological intoxication,	1	2	3
Delirium tremens,	5	2	7
Polyneuritic psychoses,	1	—	1
Acute hallucinosis,	20	10	30
Chronic delusional,	3	—	3
Chronic alcoholism,	1	—	1
Drug and toxic psychoses: —			
Morphinism,	1	—	1
Food toxicosis,	1	—	1
Involution melancholia,	4	2	6
Dementia præcox,	21	20	41
Paranoic conditions,	3	5	8
Manic-depressive psychoses: —			
Excitement,	13	17	30
Depression,	6	4	10
Epileptic psychoses,	2	1	3
Epilepsy,	3	2	5
Imbecility with insanity,	1	—	1
Constitutional inferiority,	2	—	2
Not insane,	3	9	12
Apoplexy,	—	1	1

Medical Service.—Regular staff meetings have been inaugurated for the presentation of cases for diagnosis, discussion of treatment, determination of the question of discharge, etc. A systematic record of the proceedings is kept, which proves extremely useful, especially in cases which are brought up for further discussion at a later meeting, as is often done.

The medical officers have had additional duties imposed upon them in consequence of the temporary-care service, the inauguration of staff meetings, more extended case histories with preparation of abstracts for discussion of these, more lectures to the training school, and, latterly,

the care of the nurses and other employees ill with typhoid fever. The lack of a pharmacist, too, makes necessary their performance of routine work which interferes with more important activities. The recent addition to the staff of a junior assistant physician has given needed assistance in the clinical work, and the opening of a well-equipped bacteriological and pathological laboratory toward the close of the year, with a skilled and enthusiastic worker in charge of this department, puts the medical work on a higher level, and, like the staff meetings, promotes keener interest and a progressive scientific spirit. That advantage is taken of the new facilities afforded by the laboratory is shown by the more frequent employment of diagnostic aids, such as blood examinations and lumbar puncture, also by the increased number of autopsies obtained; of these there have been 12 during the year, 5 of them in the past two months.

As a further aid to the medical staff, considerable additions have been made to the list of journals and reviews, and the medical library has had some needed accessions.

The services of a dentist, Dr. Howard A. Lane, have been secured for one forenoon each week, and this very essential part of the care and treatment of the patients is being well attended to.

Training School. — Some additions have been made to the curriculum and more definition given the schedule of work and study, but the most important change to be recorded is the extension of its privileges to the men attendants, several of whom have been induced to undertake the course. This very desirable extension of the school's usefulness was made possible, I think, by the gradual introduction of women nurses in the wards for male patients, where their influence prevails to stimulate the nursing spirit and give new interest to what is, under routine conditions, apt to be considered by the men as mere drudgery.

Another thing which has, I am sure, bettered the service in the men's department is the setting apart of a small ward for the reception and special care of new admissions. Not only has this made it possible to give the acute cases better attention, but it has emphasized to the attendants the importance of the hospital feature, and demonstrated the need of special training, for which an awakened interest creates desire.

A special course of training has been instituted which is obligatory for those attendants who do not care to take the full course in the training school. This consists of a series of lectures and demonstrations covering the essentials of nursing, and in particular the care of the insane, with systematic instruction in practical duties in the wards.

Occupation of Patients. — An earnest effort has been made to provide a variety of useful and stimulating occupation for the patients. A large party of men from the wards for the demented and untidy and disturbed classes has been engaged all the season in excavating, grading, digging ditches, laying drain pipe, repairing roads, etc., accomplishing

a creditable amount of work, and undergoing themselves an improvement in health, habits and mental condition which was very notable in some and sufficient to be gratifying in practically all. The farmer has had more patients for his work, and all other working departments have been kept well supplied. An upholsterer was employed and installed as shop foreman to develop a line of industries having as its nucleus mattress making, which has heretofore been conducted on a smaller scale. He has taught three patients to make mattresses; six or eight prepare the hair; one repairs shoes; another helps to make cushions, cut and fit curtains, etc. It is hoped that we can now add to these activities broom and mat making, and then other industries as rapidly as they can be gotten under way. In the women's department the force of seamstresses has been augmented both in the sewing room and in the wards, and in addition an industrial room is filled with patients engaged in fancy work, basketry, making artificial flowers, etc.,—employments which give them pleasure and afford mental stimulation of decided therapeutic value. Many of the women, too, had healthful outdoor work during the summer, as in previous years, gathering the fruits and vegetables daily from the garden.

WORCESTER STATE ASYLUM.

Opened in October, 1877. Present capacity, 991; increase for the year, 1.

Valuation of plant, per capita of capacity, \$1,173; real estate, \$1,043; personal, \$130.

Daily average number of patients, 1,129; increase for the year, 66.

Number Oct. 1, 1910, 1,101.

Admitted by transfer, 61; decrease for the year, 105.

Deaths of the Insane.

Whole number, 63; 5.29 per cent. of whole number of persons treated.

Tuberculosis was present in 28.57 per cent.; senile insanity in 17.46 per cent.; general paralysis in 6.35 per cent.

Finances.

Expenditures from maintenance funds, \$251,320; total receipts, \$9,208; being \$7,659 from reimbursing patients, \$1,549 from other sources.

Weekly per capita cost of maintenance computed on net expenses, \$4.28; the same less repairs and improvements, \$3.88.

Weekly per capita cost of whole service, \$1.79; ward service, \$0.61.

One person employed for every 4.17 patients; 1 nurse for every 9.29 patients.

Average monthly wage for all persons employed, \$32.46; for nurses, \$24.76; men, \$26.32; women, \$23.33.

Extract from Superintendent's Annual Report.

The asylum, to do good work, depends upon its tools as a means of obtaining results, just as surely as does the artisan, and if its tools are unfit just so surely does the product of its work deteriorate. During the past year applications for employment here have been numerous. From this number, however, it has often been difficult to select proper material, and a shortage of help has sometimes existed along with an abundance of applications. It has ordinarily been more easy to secure competent female nurses than male. For the past year the usual situation has been reversed. Male applicants have been more abundant, of somewhat better character than usual and have remained a little longer in the service. While for some years a training school for female nurses has been maintained here, membership in this school has been optional. With the beginning of the new school year all female nurses were required to take the training. This change caused several nurses to leave the service, either because they did not care to enter the school, or felt that their preliminary education was not sufficient to enable them to profitably take up a new course of study. Wherever these persons seemed desirable employees an attempt was made to retain them in some other branch of the service, usually, however, with indifferent success. Female employees entering the nursing service under the present conditions, though less in number, are of a more satisfactory class. The present requirements tend towards the elimination of the hospital "rounder," from whom the least that you demand is always a little more than the most that you can get. The general ward service is tending towards a higher and more satisfactory level. Despite the changes in requirements, the average stay of the female nurse has been longer than in the previous year.

It has long seemed to me that the asylum should come closer to the relatives and friends of its unfortunate inmates. An effort is being made in this institution to more fully acquaint the friends with the occurrences and accidents of hospital life. Serious illness has always been reported. Friends of patients are now notified of the more ordinary forms of indisposition, and particularly of accidents or injuries. Possibly this custom may, in some cases, occasion unnecessary alarm, but in its general results it is more satisfactory to the friends and to the institution management. The volunteering of information and the

perfectly open conduct of institutions should do much to remove from the public mind that measure of distrust which has sometimes obtained in the past.

In all the work of the institution much valuable assistance has been given by the labor of patients. This has not only been a source of profit to the institution, but has been a most important element in the treatment of the unfortunates who have been entrusted to our care. The men have worked on the farm, built roads, assisted in the construction of our sewage-disposal system, in the erection of new buildings, and have taken a vigorous part in all of our colony operations. Each year a considerable acreage has been added to our tillage lands. The number of our working men has been added to every year, largely by the industrial education of those formerly unemployed.

Last year a beginning was made in the effort to interest the women patients in out-of-door work. It was thought, at first, that the field of operation might be somewhat limited. It has been found, however, that it is not necessary to find special work for women. Wherever there is work for men there is work for women. The women have solved this question for themselves by undertaking the care and cleaning up of our grounds and in the lighter farm operations. They have done filling and grading, and have become quite expert in the digging out and removal of rocks. This crew is recruited from the noisy and excitable, for whom no really suitable occupation has hitherto been found. Some have become interested in this work who have before resisted all efforts at employment.

The experience of other institutions has demonstrated that hydrotherapy can do much for the relief of mental disease. The installation of suitable hydrotherapeutic apparatus at the Grafton colony would greatly assist in carrying on the medical work there. To provide proper equipment for this purpose, to prepare the room and to properly install the apparatus, I recommend that an appropriation of \$2,400 be asked for.

MEDFIELD STATE ASYLUM.

Opened in May, 1896. Present capacity, 1,543; increase for the year, 5.

Valuation of plant, per capita of capacity, \$1,113; real estate, \$1,003; personal, \$110.

Daily average number of patients, 1,633; increase for the year, 37.

Number Oct. 1, 1910, 1,700.

Admitted by transfer, 216; increase for the year, 110.

Deaths of the Insane.

Whole number, 76; 4.23 per cent. of whole number of persons treated.

Tuberculosis was present in 18.42 per cent.; general paralysis in 1.32 per cent.

Finances.

Expenditures from maintenance funds, \$316,309; total receipts, \$9,328; being \$6,370 from reimbursing patients, \$2,958 from other sources.

Weekly per capita cost of maintenance computed on net expenses, \$3.64; the same less repairs and improvements, \$3.34.

Weekly per capita cost of whole service, \$1.53; ward service, \$0.62.

One person employed for every 4.81 patients; 1 nurse for every 9.92 patients.

Average monthly wage for all persons employed, \$31.96; for nurses, \$26.80; men, \$30.03; women, \$24.93.

Extract from Superintendent's Annual Report.

In other State institutions of like character the attendants and nurses are working on a sixty-hour week basis. Here at Medfield these young men and women have been working nearly seventy hours per week. They have expressed some dissatisfaction with this, and I recommend an increase for salaries and wages, so as to put all employees of this class upon a sixty-hour week basis.

The training school continues to be of advantage to the institution in furnishing trained attendants for ward service. A class of ten young women was graduated on July 7.

GARDNER STATE COLONY.

Opened in October, 1902. Present capacity, 580; increase for the year, 5.

Valuation of plant, per capita of capacity, \$1,041; real estate, \$876; personal, \$165.

Daily average number of patients, 603; increase for the year, 50.

Number Oct. 1, 1910, 625.

Admitted by transfer, 100; increase for the year, 5.

Deaths of the Insane.

Whole number, 16; 2.34 per cent. of whole number of persons treated.

Tuberculosis was present in 12.50 per cent.; general paralysis in 6.25 per cent.

Finances.

Expenditures from maintenance funds, \$116,500; total receipts, \$2,613; being \$1,878 from reimbursing patients, \$735 from other sources.

Weekly per capita cost of maintenance computed on net expenses, \$3.65; the same less repairs and improvements, \$3.12.

Weekly per capita cost of whole service, \$1.34; ward service, \$0.48.

One person employed for every 5.97 patients; 1 nurse for every 12.12 patients.

Average monthly wage for all persons employed, \$34.52; for nurses, \$24.98; men, \$27.96; women, \$19.30.

Extract from Superintendent's Annual Report.

Indoor Industries. — The two industrial buildings under construction at the time of my last report were completed early in the year and have proved very satisfactory. A larger number can now be employed under systematic supervision, and a greater variety of articles made. At the present time 61 are regularly employed in these buildings, while of our total number of patients, 85 per cent. are daily employed in some useful and helpful occupation.

We are now making all clothing for both men and women, except knitted underwear, all boots, shoes, slippers, gloves, mittens, hats, caps, stockings, furniture, brooms and mats; weaving all toweling and half of our shirting, while a large amount of mending, fancy work and basketry is done by the women patients.

Furniture purchased not being adapted to our use, we have opened a furniture department, under direction of a skilled instructor, and will hereafter make all of our own furniture, of every description.

For several months we have knitted, on hand machines, all stockings worn by our men, and are now making all stockings required for our women patients.

Broom, brush and mattress making has been recently introduced.

We have, therefore, to deal with patients of reduced mentality, and our efforts are directed to the prevention of further loss of mind, and the stimulation and training of that mind which remains.

It can at once be seen, then, that in general the best we can hope for is to so regulate a patient's habits and occupation that his remaining intellect will be stimulated, his bodily condition improved, and, by properly selecting his occupation and persistently directing him in it, that deeper dementia be warded off. Coincident with this, secondary, but actually of great importance, is the return to the Commonwealth of the product of his labor, — labor which, to the patient, has been most beneficial.

Therefore our aim is to treat our patients by the best systematic treatment, — occupation, — while assisting and encouraging them to aid in their own support. Some, a comparatively small per cent., will go into the community again as self-supporting citizens; how many, time alone can tell us.

Two questions, then, suggest themselves. First, how much are these patients benefited by industrial treatment? Second, what has been the return coincident with, but distinctly secondary to, this form of treatment?

To the first I would answer that we cannot overstate the benefit derived. Individual cases illustrate this best, but taken all together they are far easier to care for; far less untidy, destructive and troublesome; brighter, more active, contented and cheerful. The requests to leave the colony are few, which alone, to those familiar with our hospitals for the mentally afflicted, tells its own story.

In our endeavor to check existing dementia we are constantly saying to ourselves that this present dementia, and especially the physical inactivity, should not have been allowed to reach this stage, but the same occupations they are now engaged in should have been open to them directly after their discharge from the acute receiving ward. This leads me to say that industries as an important form of treatment belong more to the acute hospital, — to *prevent* patients becoming pauperized institutionally rather than to stimulate them after they have become so.

General. — Early in the spring an orchestra was organized among the patients. Mr. W. A. Burt of Gardner was engaged as musical director, and this has been very successful. This orchestra has furnished music for dances every second week and on holidays, and has given several out-of-door concerts during the summer. It has been enjoyed more than any other form of entertainment we have provided.

On alternate weeks during the winter stereopticon views were shown by members of the staff. All holidays have been appropriately observed with entertainments by our own or professional talent. Our officers have held monthly socials, dances and card parties, at which refreshments are supplied.

Prof. W. E. Brown of Gardner conducted a course in deportment and dancing during the past winter.

MENTAL WARDS, STATE INFIRMARY.

Opened in October, 1866. Present capacity, 673; increase for the year, 1.

Valuation of plant, per capita of capacity, \$770; real estate, \$569; personal, \$201.

Daily average number of patients, 716; increase for the year, 35.

Number Oct. 1, 1910, 720.

Commitments as insane, 76; decrease for the year, 2.

First cases of insanity, 67; 88.16 per cent.

Admitted by transfer, 67; decrease for the year, 58.

First Cases of Insanity.

Native-born patients, 29.85 per cent.; mothers, 13.33 per cent.; fathers, 11.86 per cent.

Age sixty years or over, 14.93 per cent.

Resident in cities or large towns, 86.57 per cent.; country districts, 13.43 per cent.

Previous duration of insanity, under six months, 53.45 per cent.

Curable forms of insanity, 11.94 per cent.

Causes: congenital, 17.91 per cent.; hereditary, 19.40 per cent.; alcoholic, 19.40 per cent.; coarse brain lesions, 19.40 per cent.; syphilis, 13.43 per cent.

Recoveries of the Insane.

Whole number, 2; 2.63 per cent. of commitments.

Recoveries of first cases of insanity, 2; 2.99 per cent. of first cases.

Recoveries in curable group A, 2; 2.99 per cent. of such curable cases.

Deaths of the Insane.

Whole number, 75; 8.85 per cent. of whole number of persons treated.

Tuberculosis was present in 24 per cent.; senile insanity in 21.33 per cent.; general paralysis in 9.33 per cent.; coarse brain lesions in 10.67 per cent.

Extract from Trustees' Annual Report.

During the year, 6,331, or more than 88 per cent., were hospital patients.

We desire the means to construct a special ward for women, where separate rooms can be given to such patients as cannot well be cared for in open wards. We would also renew our recommendation that wooden barracks, located at some distance from the main institution, be provided for the temporary care of able-bodied men driven hither for shelter during the cold weather. When these come in upon us they crowd the more expensive quarters needed for and occupied by the more permanent population of the infirmary, which needs hospital care or provision suitable for persons permanently laid aside from the power of active and remunerative labor. The trustees believe that men, able-bodied but needing temporary shelter and care, can be more economically and yet adequately housed and fed, without congesting our more expensive and permanent buildings, if the wooden barracks for which they ask can be provided. We also ask a small sum for the purchase of additional real estate, which it would be to the State's advantage to possess.

Extract from Superintendent's Annual Report.

Much progress has been shown in the training school work, and a general improvement in the nursing in the various departments of the institution has been apparent throughout the year.

The children's hospital was opened for patients in May. This has been one of the most notable improvements in our institution for many years; removing the children to a distant point beyond our main group of buildings has already proved to be a most gratifying change.

BRIDGEWATER STATE HOSPITAL.

Opened in September, 1886. Present capacity, 662.

Valuation of plant, per capita of capacity, \$628; real estate, \$445; personal, \$183.

Daily average number of patients, 661; increase for the year, 35.

Number Oct. 1, 1910, 708.

Commitments as insane, 134; increase for the year, 31.

First cases of insanity, 117; 87.31 per cent.

Admitted by transfer, 4.

First Cases of Insanity.

Native-born patients, 55.65 per cent.; mothers, 22.43 per cent.; fathers, 29.63 per cent.

Age sixty years or over, 3.42 per cent.

Resident in cities or large towns, 78.63 per cent.; country districts, 21.37 per cent.

Previous duration of insanity, under six months, 23.68 per cent.

Curable forms of insanity, 13.68 per cent.

Causes: congenital, 11.97 per cent.; hereditary, 18.80 per cent.; alcoholic, 52.13 per cent.; senility, 2.56 per cent.; coarse brain lesions, 1.71 per cent.

Recoveries of the Insane.

Whole number, 7; 5.22 per cent. of commitments.

Recoveries of first cases of insanity, 6; 5.13 per cent of first cases.

Recoveries in curable group A, 6; 5.13 per cent. of such curable cases.

Deaths of the Insane.

Whole number, 22; 2.85 per cent. of whole number of persons treated.

Tuberculosis was present in 18.18 per cent.; senile insanity in 4.55 per cent.; general paralysis in 13.64 per cent.; coarse brain lesions in 18.18 per cent.

Extract from Medical Director's Annual Report.

Last year 103 persons were admitted. This year the admissions have increased to 138. In looking about for a cause of this somewhat unusual condition, I find no great disturbance from former years in the ratio of cases received from the various penal institutions of the State, with the single exception of the prison department of the State Farm, where I note an increase of 28 over that of last year. It may be of some interest to briefly review the class of men received from this particular source, and the conditions that led up to their arrest and commitment. Of the 78 received, 59 were sentenced as vagrants or tramps, and as far as I can learn were insane at the time they entered the prison. Regardless of this, I am still of the opinion that our hospital

is performing the specific purpose for which it was created; for from our records I glean that, without a single exception, the 78 men referred to have records of from one to ten former arrests. In the great majority of these cases the mental disease is but the capitulation of a long-beleaguered mind, and their former vagrant life but the manifestation of a well-advanced dementing process. Those figures do not argue that there is an increase in vagrants or insane in the State or in our penal institutions, but rather point to an improved method of disposing of this irresponsible class. In the past, the tendency has been for prisons to liberate every case that seemed harmless and gave reasonable assurance of being self-supporting, but as time went on it was found that such cases, if they remained in the State, invariably returned to some prison in much worse physical and mental condition, and it soon became evident that some permanent disposition of these cases ought to be encouraged, not only for their own good, but to eliminate them from the social circulation of the State and their clogging influence on prison life and reform.

I wish once more to call your attention to our gardening. This summer we have had practically all our walled-in land under cultivation, and the result shows that we are capable of doing real, profitable farming. We hope in the next few years to greatly increase the yield as the soil is brought to a higher state of cultivation. In the spring we set out a large number of berry bushes of various kinds, which will give good returns in years to come. This line of work has been so successful in results, and so popular with our patients, that I heartily recommend its extension, not only as a source of revenue to the hospital, but as a successful educational feature.

We have been encouraged to see how many apparently deeply demented men can be trained to do useful, profitable work, and I believe one of the great duties of the future insane hospital will be to re-educate such patients in some form of useful work where the minimum of skill and supervision is called for. If the above is true of cases that have gone on to permanent mental decay, it is reasonable to suppose that similar education would, to a degree, be prophylactic. I do not know of any form of work that has so many features to recommend it as farming. We do not have to fear over-production or placing our products on the open market, as we have a rapidly growing home demand for all such supplies. In our farming there is no expensive equipment; all that is required is some rough land surrounded by, say, a high, strong-meshed wire fence, to keep our patients from wandering away. If we had this additional land, we could use our present walled-in garden for patients who cannot be allowed greater freedom. While we do not aspire to poetic farming, "where every rood of land maintain'd its man," yet we have confidence that with proper training these men can be educated to be, in part at least, self-supporting.

In 1908 my predecessor made the following suggestion in his report to your Board: "In making a further provision for attendants, I would recommend that modest cottages be built which can be rented to married men at a rate to cover interest on cost and repairs. This would hardly be more expensive than the ordinary 'attendants' home,' from which there is no return, and it would be a strong inducement for married men—who are more mature and desirable—to make the care of the insane their life work." I would add my word of commendation to this plan, and suggest that a sufficient appropriation be asked for to enable us to undertake this important work.

MONSON STATE HOSPITAL.

Opened in May, 1898. Present capacity, 853.

Valuation of plant, per capita of capacity, \$968; real estate, \$811; personal, \$157.

Daily average number of patients, 731; increase for the year, 28.

Number Oct. 1, 1910, 770.

Insane commitments, 56; increase for the year, 20.

Sane epileptics admitted, 137; increase for the year, 11.

First cases of epilepsy, 174; being 90.15 per cent. of all epileptics received.

The general statistics for the year are:—

	INSANE.			SANE.			TOTALS.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
Patients in the hospital Oct. 1, 1909,	165	164	329	203	163	366	368	327	695
Admitted within the year,	36	30	66	107	89	196	143	119	262
Viz.: By commitment,	30	26	56	68	69	137	98	95	193
By transfer,	2	2	4	—	1	1	2	3	5
From escape,	1	—	1	2	—	2	3	—	3 ¹
From visit,	3	2	5	37	19	56	40	21	61
Whole number of cases within year,	201	194	395	310	252	562	511	446	957
Dismissed during year,	26	12	38	90	59	149	116	71	187
Viz.: Discharged,	5	2	7	37	15	52	42	17	59
As recovered,	—	—	—	1	—	1	1	—	1
As capable of self-support,	—	—	—	—	—	—	—	—	—
As improved,	5	2	7	31	15	46	36	17	53
As not improved,	—	—	—	5	—	5	5	—	5
Died,	14	9	23	9	12	21	23	21	44
Transferred,	—	—	—	—	—	—	—	—	—
Escaped,	—	—	—	4	—	4	4	—	4
On visit Oct. 1, 1910,	7	1	8	40	32	72	47	33	80
Patients remaining Sept. 30, 1910,	175	182	357	220	193	413	395	375	770
Viz.: State patients,	164	173	337	199	176	375	363	349	712
Private patients,	4	3	7	12	10	22	16	13	29
Reimbursing patients,	7	6	13	9	7	16	16	13	29
Number of different persons within the year,	197	192	389	289	244	533	486	436	922
Number of different persons admitted,	33	28	61	86	82	168	119	110	229
Number of different persons admitted by commitment,	30	26	56	63	69	137	93	95	193
Number of different persons dismissed,	23	10	33	71	50	121	94	60	154
Number of different persons discharged capable of self-support,	—	—	—	—	—	—	—	—	—
Daily average number of patients,	171.56	170.70	342.26	208.84	180.10	388.94	380.40	350.80	731.20
Viz.: State patients,	162.85	162.66	325.51	189.67	165.00	354.67	352.52	327.66	680.18
Private patients,	3.57	3.61	7.18	10.98	8.53	19.51	14.55	12.14	26.69
Reimbursing patients,	5.14	4.43	9.57	8.19	6.57	14.76	13.33	11.00	24.33

¹ Nominally admitted to discharge: insane: males, 2; total, 5; sane: males, 21; females, 7; total, 28; totals: males, 24; females, 9; total, 33. Three sane males, 5 sane females, time extended from visit of previous year. One sane male, time extended from escape of previous year.

First Cases of Epilepsy.

Native-born patients, 86.21 per cent.; mothers, 45.97 per cent.; fathers, 43.67 per cent.

Mean age at onset of epilepsy, 15.75 years; when admitted, 25.96 years.

Resident in cities or large towns, 70.68 per cent.; country districts, 29.32 per cent.

Deaths of Epileptics.

Whole number, 44; 4.77 per cent. of whole number of persons treated.

Tuberculosis was present in 13.63 per cent.; epilepsy was the immediate cause of death in 45.45 per cent. Mean age at first attack of epilepsy, 14.74 years; at death, 31.13 years.

Finances.

Expenditures from maintenance funds, \$167,500; total receipts, \$14,721; being \$7,717 from private patients, \$3,419 from reimbursing patients, \$365 from cities and towns, \$3,220 from other sources.

Weekly per capita cost of maintenance computed on net expenses, \$4.25; the same less repairs and improvements, \$3.93.

Weekly per capita cost of whole service, \$1.86; ward service, \$0.76.

One person employed for every 4.52 patients; 1 nurse for every 8.95 patients.

Average monthly wage for all persons employed, \$36.39; for nurses, \$29.38; men, \$32.65; women, \$25.88.

Extracts from Trustees' Annual Report.

The trustees feel that the time has now arrived when a definite future policy for the hospital must be carefully considered. One of the first questions to be discussed and to be *provisionally* settled is that of the proper number of patients who should be eventually cared for in this institution. The limit of patients in any such hospital as this must be determined provisionally from two standpoints: first, that of the general advisability of size, care of patients, etc., for institutions of this special class; secondly, from the point of view of the special circumstances and

conditions of the particular institution under consideration. The determination of questions of this character lies at the root of our present action. It would be manifestly unwise to ask for provision for power or for heat or light for 2,000 patients if it were considered advisable that the hospital should never contain more than 1,500. While the converse is also true, that is, if 2,000 is the proper number of patients for the institution eventually to care for, it may be a distinct saving to prepare early for the power, heat and light sufficient for this number, rather than to make numerous additions and extensions to plants already in existence, or to be obliged to build new ones, thus increasing the ultimate cost.

In close connection with this question is that of the kind of patients to be received, and the trustees feel that the time has now arrived when the limitations in age now existing by law should be removed. The establishment of the children's colony enables the trustees to make suitable provision for children of any age, and it seems only appropriate that the hospital should take the class most amenable to treatment and offering the strongest prospect of recovery. It will be of great advantage to the community that those afflicted with epilepsy should be adequately cared for from the earliest possible age by experts, so that if a cure is possible all available means may be taken to secure it, and if a cure is not possible, the child should be placed in the best condition mentally and physically to bear its burden. The hospital, moreover, should in justice have the opportunity of examining and treating its patients as early as is practicable after the onset of the disease. While ready to take patients at any stage of illness, it is much less beneficial to the patient and less satisfactory to the trustees to have patients admitted at a time in their illness when treatment can be of little or no avail.

For these reasons the trustees recommend that so much of the Acts of 1909, sections 57 and 58, chapter 504, as refers to a limit from age be stricken out and removed, and that no age limit be placed on patients admitted to this hospital.

FOXBOROUGH STATE HOSPITAL.

Opened in February, 1893. Present capacity, 299.

Valuation of plant, per capita of capacity, \$1,396; real estate, \$1,191; personal, \$205.

Daily average number of patients, 319 (inebriates, 114; insane, 205); increase for the year. 1.

Number Oct. 1, 1910, 303.

Finances.

Expenditures from maintenance funds, \$95.373; total receipts, \$8,121, being \$1,616 from private patients, \$868 from reimbursing patients, \$4,012 from cities and towns, \$1,625 from other sources.

Weekly per capita cost of maintenance computed on net expenses, \$5.55; the same less repairs and improvements, \$4.91.

Weekly per capita cost of whole service, \$2.15; ward service, \$0.47.

One person employed for every 3.83 patients; 1 nurse for every 15.15 patients.

Average monthly wage for all persons employed, \$35.70; for nurses, \$30.83.

Statistics regarding the insane will be found with those of other institutions for the insane.

The general statistics for the year relative to inebriates are: —

Patients in hospital Oct. 1, 1909,	92
Admissions within the year,	607
By commitment,	294
By transfer,	—
By return from leave of absence of previous years,	30
By return from escape of previous years,	—
By return from visit of previous years,	—
Voluntary,	174
Nominally for discharge,	109
Whole number of cases within the year,	699
Final discharges within the year,	447
By death while in house,	6
By death while on leave of absence,	—
By death while on visit,	—
By death, escaped,	—
As insane,	7
By time limit while in house,	7
By time limit while on leave of absence,	101
By time limit while on visit,	1
By time limit, escaped,	3

Final discharges within the year — *Con.*

As not to be benefited by further treatment while in house,	154
As not to be benefited by further treatment while on leave of absence,	21
As not to be benefited by further treatment while on escape,	20
Deported,	2
By own request, voluntary,	125
Patients absent, not finally discharged, dismissed 1910, . . .	143
Leave of absence,	140
Escaped,	3
Visit,	—
Patients absent, not finally discharged, dismissed in previous years,	52
Leave of absence,	51
Escaped,	1
Visit,	—
Patients remaining in hospital Sept. 30, 1910,	109
Viz: State patients,	103
Private patients,	5
Reimbursing patients,	1
Number of different persons within the year,	563
Number of different persons admitted,	477
Persons admitted from community,	447
Persons dismissed,	461
Daily average number of patients,	113.62
Viz: State patients,	107.81
Private patients,	5.70
Reimbursing patients, . . . . .	.11

Inebriates.

Daily average number, 114.

Commitments, 294; decrease for the year, 11.

Voluntary admissions, 174; increase for the year, 145.

Admitted for the first time to any institution for the treatment of inebriety, 287, or 61.32 per cent.

Admitted to this hospital for the first time, 399, or 85.26 per cent.; 57 for the second; 10 for the third, 1 for the fourth and 1 for the fifth.

First Cases of Inebriety.

Native-born patients, 77.44 per cent.; natives of Massachusetts, 61.40 per cent.; 32.85 per cent. of the parents were native born.

Average age at which habit began, 23.26 years; when admitted, 36.33 years; 51, or 12.78 per cent., were over 50 years old when admitted.

Average known duration of inebriety, 13.39 years.

Resident in cities or large towns, 367, or 91.97 per cent.; country districts, 32, or 8.03 per cent.

One hundred and ninety-five patients were discharged, as not to be benefited by further treatment.

Extract from Superintendent's Annual Report.

An analysis of our cases proves quite clearly what we have before maintained,—that the inebriate is a personal equation; each case a personal problem, requiring for its solution individual consideration and treatment. It should be remembered that the correct and ultimate solution of such a problem rests largely with the patient, who by his own efforts must co-operate in the educational measures carried on at the hospital. Any correctional measure imposed or any medical treatment instituted which is opposed by the patient must end in failure.

In order to appreciate the real necessity for the individual treatment of the inebriate, we should have a common idea of the nature of inebriety; doubtless much of the misunderstanding about inebriety is due to a misconception of the word "inebriate." All cases of drunkenness are not cases of inebriety, but all confirmed or habitual drinkers are properly classed as inebriates. It should be generally recognized that inebriety is a condition which must necessarily depend on a number of causes. The determination of the reason for the condition and the selection of the method for the removal of the cause are made possible only after a careful analysis of the individual case.

Besides the hospital or hopeful case, to which the foregoing remarks are strictly applicable, we must recognize several other types or forms of inebriety which demand institutional treatment. Although, unfortunately, with the present equipment of the hospital, we have been unable to care for these cases to our complete satisfaction, we can say with confidence that they should receive proper treatment and custodial care. The necessity for the State care of these cases is as great, if not greater, than that for the insane. Many of these individuals, apart from their habit of alcoholism, are of good repute, and under certain conditions are capable of earning their livelihood. Among such men we can find

many skilled laborers, who, by reason of their weakness, are not dependable, and are therefore not qualified to occupy responsible or permanent positions. Another type very frequently encountered is the middle-aged or elderly man, who, by reason of his confirmed drinking, has lost his self-respect and social position. The family and friends of such a man, after repeated trials, consider him to have forfeited all his rights and privileges. Such men, who are ostracized, frequently become outcasts and institutional "rounders." Another class of men demanding institutional care is the delinquent; in such cases alcoholism is an expression of his inborn defectivity. The patient is born with lowered resistive powers, and a critical analysis of his life shows inconsistencies and vagaries which may be considered a marked departure from normal standards. The early recognition of this type and the inauguration of educational measures is certainly indicated.

The trustees of the hospital have already called attention to the futility of subjecting such persons to prison and workhouse sentence. The only effective manner of dealing with such cases is by a method which will insure medical care and necessary discipline.

Out-patient Department. — The importance of after-care of the patient under the jurisdiction of the hospital cannot be overestimated. The system of after-care begun last year has proved its value and merits continuation. As the method is somewhat of an innovation, a short description of it is given. The department, since its inauguration, has been in charge of Dr. John A. Horgan of Boston, who has given his entire attention to the development of this work. Briefly expressed, the essentials of the department are as follows: a preliminary examination of prospective patients, to determine their fitness for hospital treatment; weekly visits to patients at hospital; visits to the homes of patients before their discharge from the hospital; visits to patients after their discharge from the hospital. Such a routine gives the patient, prior to his admission, a knowledge of the hospital and its purposes; makes it possible for us to secure an accurate and sequential history of the patient; and, lastly, it supplements the medical educational work begun at the hospital.

MASSACHUSETTS SCHOOL FOR THE FEEBLE-MINDED AT WALTHAM.

Opened in October, 1848. Present capacity, 1,440; at Waltham, 1,140; at Templeton, 300.

Valuation of plant, per capita of capacity, \$677; real estate, \$586; personal, \$91.

Daily average number of patients, 1,334; increase for the year, 53.

Number Oct. 1, 1910, 1,353.

The general statistics for the year are :—

	Males.	Females.	Totals.
Number present Sept. 30, 1909,	743	554	1,297
Admitted during the year,	211	150	361
School cases,	55	39	94
Custodial cases,	80	76	156
By transfer,	3	2	5
From visit,	33	13	46
From escape,	—	—	—
Nominal admissions,	40	20	60
Whole number of cases within the year,	954	704	1,658
Dismissed within the year,	153	152	305
Discharged,	74	61	135
Capable of self-support,	—	—	—
Improved,	49	35	84
Not improved,	25	26	51
Died,	9	13	22
Transferred,	13	61	74
On visit Sept. 30, 1910,	52	16	68
On escape Sept. 30, 1910,	5	1	6
Number present Sept. 30, 1910,	801	552	1,353
State patients,	755	524	1,279
Private patients,	18	12	30
New England beneficiaries,	28	16	44
Daily average number of patients,	787	547	1,334
Number Sept. 30, 1910, at school,	590	552	1,142
Number Sept. 30, 1910, at colony,	211	—	211
Applications during the year,	—	—	464

Finances.

Expenditures from maintenance funds, \$271,612; total receipts, \$20,469; being \$15,483 from private sources, \$1,022 from reimbursing patients, \$1,248 from cities and towns, and \$2,716 from other sources.

Weekly per capita cost of maintenance computed on net expenses. \$3.85; the same less repairs and improvements, \$3.43.

Weekly per capita cost of whole service, \$1.53; ward service, \$0.72.

One person employed for every 5.28 patients; 1 nurse for every 8.55 patients.

Average monthly wage for all persons employed, \$34.97; for nurses, \$26.49; men, \$30.70; women, \$25.73.

Extract from Superintendent's Annual Report.

The records of admission show that 62 females over fourteen years of age, and all within the child-bearing period, were admitted during the year. Of this number, 2 had borne two children each, and 12 had borne one child each. It has recently been said —

that practically all (high-grade) indigent feeble-minded women become mothers of illegitimate children, many of them soon after reaching the age of puberty; that most of the children of feeble-minded women are feeble-minded; that the histories of these feeble-minded women and their feeble-minded children are practically the same. Their birth, poverty, helplessness, ruin and bearing of illegitimate, feeble-minded children form parts of an endless chain, a recurring sequence. By means of it the State is continually supplied with degenerate human beings.

There is need of further provision for a very large number of this class. The applications for the admission of females outnumber those for the admission of males 2 to 1.

Increasing attention is being paid to the relation between mental defect, crime and pauperism. We have many applications for the admission of people who have committed some crime or misdemeanor, or who have become troublesome members of the community by reason of their immoral and criminal tendencies. It is recognized that our reformatories and penal institutions contain a class of persons who are defective mentally, and irresponsible. If these defectives are discharged at the expiration of their sentences, they are soon again arrested or become public charges in some way.

The symptoms of mental defect shown in these imbeciles with criminal instincts are merely the usual signs of feeble-mindedness, modified only in degree and not in kind. The mental defect is relatively slight, and the immoral and criminal tendencies are strongly developed, but the mental weakness is the cause of the moral delinquency, and is a permanent condition. These people seem so bright that it is not easy to get physicians to certify them as feeble-minded, or to persuade judges to commit them as feeble-minded. Indeed, they and their friends are unhappy if they are placed with the feeble-minded.

The term feeble-minded is misleading, and does not fully describe and designate this special class. The legal definitions and precedents relating to the ordinary cases of feeble-mindedness are ineffective and inadequate for this purpose. The combination of mental defect and

irresponsibility with the criminal propensities of this class would be well expressed by the term "defective delinquent."

There is urgent need of special legal recognition of this type of defective delinquent, and of suitable provision for proper commitment and permanent detention. This form of commitment should be similar to that used for the commitment of the insane, with all the safeguards there found. These defective delinquents should be permanently committed to a special institution, combining the security and discipline of a prison with the education and training of a school for the feeble-minded. Provision for this class should be made so broad as to include cases in the community or in the courts, cases recognized in the penal institutions, and cases which develop in the institutions for the feeble-minded. The rights of the individual should be safeguarded by repeated expert examination, and by the possibility of discharge under some form of efficient, continued supervision.

At the school we now have at least 28 defective delinquents of this type, 21 of whom were transferred from the Lancaster Industrial School and 7 committed from the community. These cases do not respond to the methods of discipline and control which are effective with the feeble-minded. They are insubordinate and incorrigible, and subject to outbreaks of temper and violence. They often assault their fellow patients and the officers who are in charge of them. They have to be closely guarded to prevent escape. This particular group is made up of desperate, hardened women, who are manifestly out of place in an institution for the care of the feeble-minded.

This year we have shipped thirteen full carloads of farm produce from the Templeton farm colony to the school at Waltham, in addition to the large amount of farm products used for food at the colony. This home-grown farm produce has materially reduced the expenditures for food. These food supplies, produced by the labor of our boys, make it possible for the children at Waverley to have a most nutritious dietary at a reasonable expense. This year, as usual, a very large amount of fruit has been enjoyed by the children.

The colony is visited by many institution officials. As a rule they are impressed by the interest and enthusiasm which the boys show in the working and development of the estate, and by the happiness which is the evident result of their interest and industry. It would be hard to find a more healthy and contented group of people. From our standpoint the life at the colony is the ideal life for the adult able-bodied defective.

We now have such a variety of manual work for both boys and girls that within certain limits they themselves decide what particular form of work they shall take up. All of the children of suitable age receive training daily in the manual department, averaging from two to four hours per day. The pupils do not spend all this time at one industry, but, for instance, a boy may go into the painting class, the shoemaking class and the weaving class for equal periods, if these are the occupa-

tions which interest him most, and in which he is most proficient. We do not try to make a pupil expert in one particular trade at an early age, but rather to give him a variety of interests and of training. Everything the children make is of value, and is actually used for the school. None of the products of the manual department are sold. If any article is produced in larger quantities than we can use, the pupils at work in that department are transferred to some other industry, and the production cut down for the time.

The foundation of our work is the long-continued training and education of the younger pupils, from the habit training and body training of the little children in the west building to the highest classes in the schoolhouse and manual departments. Applied interest and directed activity is the keynote of all this training. In the daytime no boy or girl is supposed to be idle. He is at work, or at play, or in school every minute of the time. His interests are followed so far as possible. When he has acquired the power to do things, this power is applied in doing something that is worth while, or in making something that is worth making. This policy, carried out until adult life is reached, makes it possible for our boys to do their work at the colony, and for the girls to do their work in the sewing room, laundry and other productive departments of the school. This long-continued training is equally beneficial if the patient is taken home when adult life is reached.

WRENTHAM STATE SCHOOL.

Opened in June, 1907. Present capacity, 250.

The general statistics for the year are : —

	Males.	Females.	Totals.
Number remaining Sept. 30, 1909,	42	—	42
Admitted within the year,	97	108	205
By commitment,	79	48	127
By transfer,	14	60	74
Returned from visit,	2	—	2
Nominally for discharge,	2	—	2
Whole number of cases within the year,	139	108	247
Dismissed within the year,	25	8	33
Viz.: Died,	—	1	1
Discharged,	11	4	15
Transferred,	3	1	4
Escaped,	1	—	1
On visit,	10	2	12
Remaining Sept. 30, 1910,	114	100	214
Daily average number,	65.63	45.60	111.23

Finances.

Expenditures from maintenance funds, \$45,278; total receipts, \$222; being \$61 from private patients and \$161 from other sources.

Weekly per capita cost of maintenance computed on net expenses, \$6.15; the same less repairs and improvements, \$5.53.

Weekly per capita cost of whole service, \$2.24; ward service, \$0.53.

One person employed for every 4.13 patients; 1 nurse for every 10.22 patients.

Average monthly wage for all persons employed, \$40.13; for nurses, \$23.61; men, \$29.14; women, \$23.14.

Extract from Superintendent's Annual Report.

In April, as everything was in readiness, we began to admit children direct from the community. The class of children who poured in at our open doors, however, was of a higher grade mentally than we had anticipated. Of these admissions very few are of the sluggish, inactive class. On the contrary, they are largely of the excitable, reckless, destructive type, with the criminal instinct well marked. Among these recent admissions are a number of adult girls, many of whom are physically rather attractive. The clamor for admission of these higher mental defectives to our institution testifies to the fact that mental defect among the higher grades is being recognized by physicians, social workers, teachers and all molders of public sentiment as never before, and promises much towards the prevention of degeneracy in the future. With the growing demand for the admission to our institution of the above-described complex types, is the corresponding demand, from necessity, for higher grade employees to care for these unfortunates. I know of no vocation where there is a greater amount of resourcefulness, tact, patience and devotion to duty required than in the proper care of our inmates.

The farm colony is certainly proving its real worth in solving the problem of many a troublesome boy admitted to the institution. In our endeavor to meet the demands of the parent to give his child, regardless of the child's mental ability, some form of schoolroom instruction, how often already we have erred by pursuing that policy at first, only to be driven, as a last resort, to placing the boy at the farm colony. Here the boy who has been so troublesome settles down to assisting in the care of the farm stock, the raising and harvesting of crops, driving the teams, clearing the land, getting the fuel, and, in fact, becomes so interested in the many phases of farm life that both he and the employees soon forget that this ever was the troublesome boy. In addition to the raising and harvesting of the farm crops and caring for the stock our

boys have assisted another year very materially in the construction work; in the hauling of building material, the building of roads and walks, grading around the new buildings, clearing up the groves, etc. The groves in the vicinity of the new buildings have been well cleared of underbrush, but there is much more of this clearing to be done at once in order to protect valuable property from the danger of forest fires.

HOSPITAL COTTAGES FOR CHILDREN.

This is a private institution, for which the Governor appoints five trustees, in addition to those selected by the corporation. It is maintained from the income of private funds, donations and the board of patients. State and town charges are received for \$3.25 a week, although the weekly cost of support is considerably in excess of this amount. In consideration of this service the State has from time to time appropriated money for buildings and structural improvements. It is subject to supervision by the State Board of Insanity, to which it makes a financial statement, and furnishes such other information as may be required.

Opened in June, 1882. Present capacity, 140. Daily average number, 132.

Valuation of plant, per capita of capacity, \$683. Permanent funds, \$305,563. Expenditures for maintenance, \$36,387. Receipts, \$41,968; support of State charges, \$16,695; from cities and towns, \$587; from individuals for support of patients, \$5,029; from sales, contributions and other sources, \$19,657. Weekly per capita cost of maintenance, \$4.94.

The general statistics for the year are : —

Patients in the hospital Oct. 1, 1909,	130
Admitted within the year,	49
Whole number of cases within the year,	179
Dismissed within the year,	41
Viz.: As recovered,	3
As much improved,	10
As improved,	14
As not improved,	12
As died,	2
Patients remaining Sept. 30, 1910,	138
Viz.: State patients,	105
Town patients,	3
Private patients,	30

Daily average number of patients,	132
The largest number on any day,	140
The smallest number on any day,	124

Forty epileptics were admitted, being 81.63 per cent. of all admissions. Thirty epileptics were dismissed: 12 not improved; 12 improved; 6 much improved. Three epileptics who would have been discharged as recovered from epilepsy, being homeless, were allowed to remain until some other provision could be made for them.

Extract from Trustees' Annual Report.

The superintendent's report will indicate to you a large year's work, still larger than last year, when we reported larger than the previous year. Although our available accommodations have been still somewhat reduced by the continuous work of renovation, the average number of children cared for during the year has nearly equalled the largest number of previous years.

Special effort has been made to provide for all epileptic children until the new buildings for children at the Monson State Hospital are ready for occupancy, and by sending 17 eligible cases to that institution during the year, it has been possible to admit every Massachusetts epileptic under eleven years of age applying for admission, so that the year closes with no waiting list of such cases.

A room which had been standing vacant during the changes incident to the repairs in progress has been fitted up temporarily as a nurses' sitting room, and has been found to contribute so much to their happiness and comfort that it is hoped some permanent provision can be made for that purpose before the renovations and alterations in progress are completed.

An important addition to the equipment of our plant is the new well, on which work was begun last fall. The need of additional water supply was regarded as imperative. Such visible springs and streams as had been considered possibilities were investigated, and it was deemed useless to indulge in further hopes from these sources. After careful study of the contour of the land and tilt of the ledge, a corner of the last purchase of land was selected as the most promising location for another well. At a depth of 12 feet a shelly ledge was encountered, and the hole left by the removal of each piece of rock filled with water. The use of dynamite and further digging revealed a flow of nearly 1,000 gallons of water an hour at a depth of 19 feet. Such a flow of water in such a drought would seem to indicate a solution of the water problem so far as the farm, at least, is concerned, and possibly a considerable contribution toward the solution of the larger problem for the hospital, to which

water can be delivered from this well if it should prove more than sufficient for the needs of the farmstead. Consistent with the policy of the hospital the work has been thoroughly done.

THE PRIVATE INSTITUTIONS.

THE McLEAN HOSPITAL.

Opened in October, 1818. Present capacity, 220.

Valuation of plant, per capita of capacity, \$8,557.

Average weekly per capita cost of maintenance, \$25.13.

Daily average number of patients, 221; increase for the year, 5.

Number Oct. 1, 1910, 216.

All commitments, 162; increase for the year, 1.

Commitments as insane, 154; decrease for the year, 4.

First cases of insanity, 112; 80.29 per cent.

Voluntary admissions, 67; decrease for the year, 23.

Emergency commitments, 11; increase for the year, 2.

First Cases of Insanity.

Native-born patients, 83.93 per cent.; mothers, 67.59 per cent.; fathers, 66.97 per cent.

Age sixty years or over, 15.18 per cent.

Resident in cities or large towns, 74.11 per cent.; country districts, 25.89 per cent.

Previous duration of insanity under six months, 59.82 per cent.

Curable forms of insanity, 50 per cent.

Causes: hereditary, 38.39 per cent.; alcoholic, 9.82 per cent.; coarse brain lesions, 8.04 per cent.; senility, .89 per cent.; syphilis, 4.46 per cent.

Recoveries of the Insane.

Whole number, 37; 24.03 per cent. of commitments.

Recoveries of first cases of insanity, 29; 25.89 per cent. of first cases.

Recoveries in curable group A, 24; 42.86 per cent. of such curable cases.

Deaths of the Insane.

Whole number, 16; 4.22 per cent. of whole number of persons treated.

Curable forms of mental disease present in 37.50 per cent.; senile insanity in 18.75 per cent.; general paralysis in 6.25 per cent.; coarse brain lesions in 11.80 per cent.

Extract from Superintendent's Annual Report.

Proctor Recreation Room.—The need, mentioned in the last annual report, of a recreation room for patients of the Proctor House has been supplied by the expenditure of a portion of the Lovering bequest for last year. A room in the basement of the men's gymnasium has been finished and fitted up for this purpose. The walls are of painted brick, a cement floor is covered with battleship linoleum and there is a large Saxony rug before the fireplace. There are pictures of varying merit on the walls, a billiard table in one end, and in the other a piano, tables, games, books and periodicals. It is an exceedingly comfortable and attractive room for smoking and recreation, and supplies a long-felt need.

Diversion.—The value of the various forms of diversion and amusement and of manual occupation, especially the latter, has been recognized in this hospital from its beginning. In his first published report, in 1822, Dr. Rufus Wyman writes of its value "to divert the attention from unpleasant subjects of thought and afford exercise both of body and mind." They "have a powerful effect in diverting the mind, breaking up wrong associations of ideas and inducing correct habits of thinking as well as acting." This has been the opinion of all superintendents since his day, as it appears in their annual reports, and the hospital accounts show the expenditure of large sums of money for this purpose.

A distinct advance has been made during the year toward supplying useful employment for the women patients. In order to give a wider range to their activities, and more especially in order to add to the interest of their employment by making it useful, Miss Emily Haines, who has had a wide experience in the public schools, was engaged as a teacher in handiwork, and has come to the hospital four days in the week to direct the work, which was begun in May. Instruction has been given in basketry, the making of various articles in leather, in weaving and in the making of lace, besides continuance of drawing and painting which has been carried on here for many years. The product of the work has been in many instances surprisingly good and in all cases useful. The large number of articles which have been made are used by the patients, or are given by them to their friends. There is thus a motive

for work, which adds interest. Possibly if the hospital should enter upon the manufacture of certain articles, in the making of which patients might become skillful and for whose work a fair compensation were paid, some might take a greater interest, but the money compensation would be rather small, and probably most of them would take quite as much interest in making things to give away as they would in working for money.

Warm Baths. — The continuous warm bath as used here since October, 1908, has proved to be of great value in the treatment of excited patients. Its use is voluntary on the part of the patient. There is absolute freedom of movement, and the patients are in and out of the tub at will, but as a rule they like it well enough to prefer to stay in the water. Such freedom of movement is possible because the apparatus for control of the water supply and the regulation of its temperature is in a closet beyond the reach of the patient. Thus far the baths have been used by night only exceptionally. The usual time is from about 8 o'clock A.M. to 5 o'clock P.M. The patients retire early and are much more likely to sleep than they are without the bath. As a rule the appetite improves and there is a gain in weight. The bath lessens noise and violence, and renders the care of such patients much easier for the nurses.

OTHER PRIVATE INSTITUTIONS

licensed by the Governor and Council under the provisions of section 24, chapter 504, Acts of the Legislature of 1909, number 23. Additional licenses to care for the insane, epileptic, feeble-minded and persons addicted to the intemperate use of narcotics or stimulants were granted during the year as follows: on Nov. 26, 1909, to Edward Mellus, M.D., in Newton; on Dec. 15, 1909, to Mabel D. Ordway, M.D., in Jamaica Plain; and on Feb. 16, 1910, to Robert T. Edes, M.D., in Reading. The licenses of Arthur H. Ring, M.D., and George B. Coon, M.D., originally granted to care for the insane, were extended during the year to receive epileptic, feeble-minded and persons addicted to the intemperate use of narcotics or stimulants.

On Sept. 30, 1910, there were in these institutions 169 patients, a decrease of 16 for the year. The insane numbered 104, or 61.53 per cent. There were 151 admissions of the insane and 150 dismissals during the year.

The numbers on Sept. 30, 1910, for each institution are set forth in the following tabulation: —

INSTITUTIONS.	NUMBER OF PATIENTS SEPT. 30, 1910.		
	Sane.	Insane.	Totals.
Bournewood, Henry R. Stedman, M.D.,	1	11	12
The Highlands, Frederick W. Russell, M.D.,	1	-	1
Channing Sanitarium, Walter Channing, M.D.,	9	12	21
Norwood Private Hospital for Mental Diseases, Eben C. Norton, M.D.	-	2	2
Pine Terrace, W. F. Robie, M.D.,	3	1	4
Herbert Hall Hospital, John Merrick Bemis, M.D.,	-	25	25
Newton Sanatorium, N. Emmons Paine, M.D.,	-	-	-
Locust Grove Asylum, Miss Alice R. Cooke,	-	4	4
Dr. Ring's Sanatorium, Allan Mott Ring, M.D.,	7	1	8
Framingham Nervine, Ellen L. Keith, M.D.,	10	1	11
Wellesley Nervine, Edward H. Wiswall, M.D.,	9	8	17
Private Hospital, J. F. Edgerly, M.D.,	1	-	1
Private Hospital, George B. Coon, M.D.,	1	7	8
Highland Hall, Samuel L. Eaton, M.D.,	8	1	9
Dr. Reeves' Nervine, Harriet E. Reeves, M.D.,	-	5	5
Wheeler Sanitarium, Mrs. Maria H. Paul,	1	5	6
Arlington Health Resort, Arthur H. Ring, M.D.,	8	7	15
Private Hospital, Edward B. Lane, M.D.,	-	1	1
Private Hospital, H. N. Archibald, M.D.,	3	-	3
Private Hospital, Henry C. Baldwin, M.D.,	-	-	-
Glenside, Mabel D. Ordway, M.D.,	2	3	5
Newton Nervine, Edward Mellus, M.D.,	-	10	10
Conecroft, Robert T. Edes, M.D.,	1	-	1
Totals,	65	104	169

UNLICENSED SANITARIUMS.

The supervision of private hospitals has led to the visiting of 66 unlicensed places where the insane, epileptic, feeble-minded or those addicted to the use of alcohol or narcotic drugs were likely to be found. These varied from small homes, where but 2 or 3 patients could be accommodated, to more pretentious and highly organized hospitals accommodating a hundred. Almost none of the managers of these were acquainted with the laws governing private hospitals for the above-mentioned classes of patients. In each case the new law was fully explained and a copy placed in the hands of the manager. There are doubtless many other places of like character in the

State that have not yet come to our attention. Twenty-six of the places visited were maintained by nurses, either graduates or experienced; 18 by physicians; 7 by corporations or companies; 15 by other individuals.

In 31 places there were found patients who, by the strictest interpretation of the law, would have been classed in one of the categories above-mentioned.

In 5 instances it seemed necessary to request the removal of the patient to the care of a licensed or State hospital. This removal has been already accomplished in 4 of the cases.

In many instances of senile insanity, and others of mild forms where the care appeared to be kindly and adequate, and the risk involved a reasonable one, the patient was permitted to remain undisturbed. In some cases such a patient had been for a long period, perhaps a number of years, in the place where she was found, and a change would have meant discomfort or hardship or unnecessary annoyance to both the patient and friends.

There is but 1 unlicensed private hospital for epileptics. This was established before the law went in force and is in charge of a physician. It is now subject to the supervision of the Board. There are 6 known private hospitals for those addicted to alcohol and drugs, all established before the enactment of the law and continuing under the supervision of the Board. One of these has not yet been visited.

Among all of these places there were found, besides those already mentioned, a few scattered alcoholics, epileptics, feeble-minded and paralytics. Twenty-two of the places have been visited more than once, and 25 at least will require more or less regular supervision for a while.

At the Washingtonian Home, an old corporation in Boston for inebriates, seclusion is used as needed for the delirium tremens cases. The outside doors of this institution are always locked. It is under the supervision of a physician of long experience in the care of inebriates, who lives in the institution.

The instructions of the Board, which permit the care of certain cases in unlicensed places subject to supervision, appear to work well and grant a certain relief of mind to those maintaining homes for the nervous, convalescent or chronic cases,

who incidentally from time to time receive patients whose precise condition cannot beforehand be determined. The supervision has not been met with resentment, and on the whole it has apparently been welcomed when its purpose and nature were explained and understood. Conditions have noticeably improved in some places. The knowledge of the law and the liability of visitation by an agent of the Board are pretty well known, and the inclination to receive proscribed cases has been very much lessened. Several persons have told me that they had refused cases of doubtful nature but which they felt that they could have perfectly taken care of, because of their knowledge of the law.

While the supervision given cannot guarantee the suppression of all undesirable conditions, it is certain that the work thus far has produced desirable results, and that, with the spread of the knowledge of the law, there will be less likelihood of attempts to establish undesirable places.

FAMILY CARE.

First patient boarded in a family, Aug. 10, 1885. Since placed, 1,038 different patients.

Number in families, Oct. 1, 1910, 275; 14 men, 261 women. Placed during the year, 75 persons, an increase of 17.

Daily average number for the year, 242, an increase of 7.

Passed out of public support: —

During the year, 13, a decrease of 4, viz.: discharged self-supporting, 2; self-supporting in families, 9; boarded with friends without public expense, 2.

Since 1885, 220 different patients, viz.: discharged self-supporting, 89; discharged to care of friends, 38; self-supporting in families, 55; boarded with friends without public expense, 21; became private patients, 17.

Reappeared under public support: —

During the year, 5; since 1885, 57; 26 per cent.

Number of families having patients, 131, an increase of 14; 70 families having 1 patient, 18 families, 2; 11 families, 3; 25 families, 4; 6 families, 5; 1 family, 6.

Number of cities and towns in which patients are boarded, 58; an increase of 4. Largest number of patients in any one town, 67; of families, 24.

The general statistics for the year are: —

	1910.			INCREASE FOR THE YEAR.		
	Men.	Women.	Totals.	Men.	Women.	Totals.
Remaining Sept. 30, 1909,	10	231	241	1 ¹	2 ¹	3 ¹
Admitted within the year,	8	71	79	4	9	13
By transfer from institutions,	7	68	75	4	12	16
Nominally at end of visit, for discharge,	1	3	4	1	1 ¹	—
Nominally at end of escape, for discharge,	—	—	—	1 ¹	2 ¹	3 ¹
Whole number of cases within the year,	18	302	320	3	7	10
Dismissed within the year,	4	41	45	1 ¹	23 ¹	24 ¹
Viz.: Discharged,	4	5	9	2	7 ¹	5 ¹
Capable of self-support,	4	3	7	3	3 ¹	—
Requiring further care,	—	2	2	1 ¹	4 ¹	5 ¹
Transferred to institutions,	—	36	36	2 ¹	9 ¹	11 ¹
Unsuitable,	—	13	13	1 ¹	9 ¹	10 ¹
Temporarily,	—	17	17	—	2 ¹	2 ¹
Ill,	—	6	6	1 ¹	2	1
Died,	—	—	—	—	4 ¹	4 ¹
On visit, Sept. 30, 1910,	—	—	—	1 ¹	3 ¹	4 ¹
Remaining Sept. 30, 1910,	14	261	275	4	30	34
Viz.: Supported by State,	7	221	228	3	19	22
Reimbursing,	—	9	9	—	4	4
Private,	2	9	11	1	2	3
Self-supporting,	4	20	24	—	7	7
Living with friends without public aid,	1	2	3	—	2 ¹	2 ¹
Number of different persons within the year,	17	295	312	3	13	16
Number of different persons admitted,	7	68	75	4	13	17
Number of different persons dismissed,	3	37	40	1 ¹	19 ¹	20 ¹
Daily average number,	10.81	230.91	241.72	.45 ¹	7.64	7.19
State,	4.84	200.44	205.28	1.68 ¹	4.23	2.55
Reimbursing,	—	6.51	6.51	—	1.96	1.96
Private,	1.66	7.11	8.77	.66	.48	1.14
Self-supporting,	3.31	13.29	16.60	.57	1.02	1.59
Living with friends without public aid,	1.00	3.56	4.56	—	.05 ¹	.05 ¹

¹ Decrease.

The total and weekly per capita expenditures of the State on account of patients in private families for the year ending Nov. 30, 1910, and since Oct. 1, 1889, are shown as follows:—

	Fiscal Year ending Nov. 30, 1910.	Since Oct. 1, 1889.
Payments for board,	\$32,973 47	\$484,602 51
Average number of patients, exclusive of private patients, .	238. 27	186. 61
Weekly per capita cost of board,	\$2 66	\$2 36
Payments for extra clothing, not included in board rate, . .	\$176 55	\$1,763 28
Payments for medical attendance, etc., not included in board rate,	\$111 57	\$3,708 51
Weekly per capita cost of such expenses, outside of board rate,	\$0 02	\$0 03
Weekly per capita cost of support (being cost of board, clothing, medical attendance, etc.).	\$2 68	\$2 39
Payments for supervision (being transportation, salaries and expenses of visitors).	\$5,346 72	\$60,705 76
Average number of patients,	247. 66	196. 62
Weekly per capita cost of supervision,	\$0 42	\$0 28
Weekly per capita cost of support and supervision, . .	\$3 10	\$2 67

FIRST ADMISSIONS.

Of the 59 first admissions, 13 had been in institutions continuously for less than a year; 14, one to two years; 13, two to three years; 3, three to four years; 4, four to five years; 2, five to seven years; 2, nine to ten years; 3, ten to fifteen years; 4, fifteen to twenty years; 1, twenty-one to twenty-two years. The average hospital residence was four years, three months.

Of the 27 persons so residing less than two years, 7 had been previously insane inmates of institutions.

Of the 59 persons first admitted, 9 were returned to institutions. The remainder were successfully boarded; 3 were discharged, 3 became self-supporting, 20 improved mentally and physically, 16 improved physically, 1 improved mentally and 7 made no improvement.

READMISSIONS.

Of the 16 such cases, 12 were readmitted for the first time, 1 for the second time, 1 for the third time, 1 for the fourth time and 1 for the fifth time. Six had remained in institutions after

return from boarding less than a year; 3, one to two years; 5, two to three years; 1, three to four years, and 1, eight to nine years; the average duration being one year, eleven months.

Eleven had been returned to institutions temporarily after boarding an average of two years, two months; 5 as unsuitable after boarding an average of eleven months.

DISCHARGES.

Nine cases were discharged; 4 after boarding less than a year; 2, one to two years; 1, three to four years; 1, four to five years; 1, six to seven years.

One had been continuously an inmate of an institution prior to boarding out eighteen to nineteen years; 1, seven to eight years; 1, five to six years; 1, three to four years; 2, two to three years; 2, one to two years; 1, less than a year.

Seven were discharged self-supporting, 2 to friends.

TRANSFERS TO INSTITUTIONS.

Thirty-six cases were transferred to institutions; 13 as unsuitable; 6, physically ill; 17, temporarily.

Of the 13 so transferred as unsuitable, 9 had boarded less than a year; 2, one to two years; 1, five to six years; 1, eight to nine years; the average duration being one year, five months. Seven had been tried in one family, 2 in two families and 4 in three families.

Of the 6 so transferred as ill, 2 had boarded two to three years; 1, five to six years; 1, six to seven years; 1, eight to nine years; 1, twenty-one to twenty-two years; the average duration being seven years, eleven months. One remained in an institution, 3 died within one month, 1 within five months and 1 within six months.

Of the 17 so transferred temporarily, 9 had boarded less than a year; 2, two to three years; 1, three to four years; 4, four to five years; 1, seven to eight years. Four were readmitted to family care within the year.

TRANSFERS BETWEEN FAMILIES.

There were 68 transfers between families. The reasons for such transfers are shown as follows:—

Self-support,	8
More employment,	3
To friends,	1
To be nearer friends,	2
For better accommodations,	4
Patient dissatisfied,	8
Patient not useful,	6
Patient troublesome,	22
Caretaker ill,	2
Death of caretaker,	4
Caretaker unsuitable,	3
Patients no longer desired,	5

DEATHS.

No deaths occurred among family-care patients during the year.

ESCAPES.

Two patients left their caretakers without leave. Both were found and returned to institutions.

FAMILIES.

The 275 patients remaining Sept. 30, 1910, were in 131 families, an increase of 14. Seventy families had 1 patient each; 18 families, 2; 11 families, 3; 25 families, 4; 6 families, 5; 1 family, 6.

Fifteen of these patients were with relatives, 10 with interested friends.

Fifty-three new families applied for patients, 9 being rejected. Thirty-five new families were given patients within the year.

Two families became unsuitable and patients were withdrawn.

CITIES AND TOWNS.

The patients remaining Oct. 1, 1910, resided in 58 cities and towns: —

Amesbury, 2; Arlington, 1; Ashfield, 2; Ashland, 4; Attleborough, 1; Bellingham, 1; Billerica, 4; Boston, 3; Bridgewater, 2; Brockton, 1; Brookfield, 4; Chelmsford, 1; Chelsea, 1; Cummington, 1; Dover, 5; Dunstable, 3; Easthampton, 2; Easton, 4; Everett, 1; Framingham, 3; Goshen, 2; Hanover, 1; Haverhill, 2; Hawley, 2; Holbrook, 1; Holliston, 9; Hopkinton, 4; Hyde Park, 1; Leicester, 4; Lowell, 1; Needham, 7; New Bedford, 1; New Braintree, 1; Newton, 1; Northampton, 1; Northborough, 2; North Brookfield, 16; Norton, 6; Petersham, 2; Plymouth, 2; Prescott, 1; Reading, 4; Revere, 1; Rochester, 1; Salem, 1; Somerville, 2; Southborough, 6; Stoneham, 1; Taunton, 13; Tewksbury, 67; Tyngsborough, 1; Walpole, 9; Westborough, 29; Whitman, 1; Williamsburg, 5; Wilmington, 15; Winthrop, 1; Woburn, 5.

FAMILY CARE OF THE INSANE UNDER TRUSTEES.

The trustees of institutions were authorized, by chapter 458 of the Acts of 1905, to place their patients in the care of private families under substantially the same conditions as the State Board.

First patient boarded in a family, June 13, 1905. Since placed, 32 different patients.

Number in families Oct. 1, 1909, 10; 2 men and 8 women.

Placed during the year, 4 persons, a decrease of 5.

Number of families having patients, 6; an increase of 1; 4 families having 1 patient; 2 families, 3.

Number of towns in which patients are boarded, 5, an increase of 1. Largest number of patients in any one town, 4; of families, 2.

The general statistics for the year are: —

Northampton Hospital.

	1910.			INCREASE FOR THE YEAR.		
	Men.	Women.	Totals.	Men.	Women.	Totals.
Remaining Sept. 30, 1909,	-	8	8	1 ¹	3	2
Admitted within the year,	2	2	4	1 ¹	6	5
Whole number of cases within the year,	2	10	12	-	3 ¹	3 ¹
Dismissed within the year,	-	2	2	2 ¹	3 ¹	5 ¹
Viz.: Returned to hospital,	-	1	1	2 ¹	3 ¹	5 ¹
Temporarily,	-	-	-	-	1 ¹	1 ¹
Ill,	-	1	1	1 ¹	-	1 ¹
Unsuitable,	-	-	-	1 ¹	2 ¹	3 ¹
Discharged on visit,	-	1	1	-	1	1
Escaped,	-	-	-	-	1 ¹	1 ¹
Remaining Sept. 30, 1910,	2	8	10	2	-	2
Supported by State,	-	6	6	-	1	1
Private,	-	2	2	-	1 ¹	1 ¹
Self-supporting,	2	-	2	2	-	2
Number of different persons within the year,	2	10	12	-	3	3
Number of different persons admitted,	2	2	4	1	6 ¹	5 ¹
Number of different persons dismissed,	-	2	2	2 ¹	3 ¹	5 ¹
Daily average number, . . . . .	.54	8.52	9.06	.32 ¹	2.13	1.81
State,	-	5.52	5.52	.09 ¹	1.29	1.20
Private,	-	2.00	2.00	-	.09	.09
Self-supporting, . . . . .	.54	-	.54	.23 ¹	.25 ¹	.48 ¹
No expense,	-	1.00	1.00	-	1.00	1.00

¹ Decrease.

THE STABILITY OF SERVICE

in the institutions averages about the same as the previous year. There were 2.54 rotations of all employees, compared with 2.26 rotations the previous year; 2.83 in the nursing staff, compared with 2.55 the previous year. The maximum stability for the whole service was at the Northampton Hospital, where there were only 1.86 rotations; and for the nursing staff, at the School for the Feeble-minded, where there were 2.13 rotations.

The average length of the interval between rotations of all employees was 4.79 months; of all nurses, 4.30 months; men nurses, 3.39 months; women nurses, 5.33 months.

The average shortage of employees was 7 per cent., the same as the previous year.

Rotation in Service of Persons employed in Institutions during the Fiscal Year ending Nov. 30, 1910.

INSTITUTIONS.	WARD SERVICE.						WHOLE SERVICE.			
	MEN.			WOMEN.			TOTALS.			Ro-tations.
	Average Number of Nurses.	Number Different Persons.	Ro-tations.	Average Number of Nurses.	Number Different Persons.	Ro-tations.	Average Number of Nurses.	Number Different Persons.	Average Number of All Em-ployees.	
The insane: —										
State hospitals: —										
Worcester,	66	312	4.73	69	234	3.39	135	546	282	2.82
Taunton,	62	245	3.95	69	181	2.62	131	426	246	2.48
Northampton,	34	99	2.91	36	70	1.94	70	169	146	1.86
Danvers,	54	195	3.61	76	186	2.45	130	381	266	2.37
Westborough,	62	180	2.90	97	194	2.00	159	374	294	2.70
Boston,	45	186	4.13	76	166	2.18	121	352	210	2.46
Totals,	323	1,217	3.77	423	1,031	2.44	746	2,248	1,444	2.50
State asylums: —										
Worcester,	58	255	4.40	63	148	2.35	121	403	269	2.81
Medfield,	61	168	2.75	106	212	2.00	167	380	344	2.32
Gardner Colony,	33	103	3.12	17	41	2.41	50	144	102	2.35
Totals,	152	526	3.46	186	401	2.15	338	927	715	2.60
Hospitals and asylums,	475	1,743	3.67	609	1,432	2.35	1,084	3,175	2,159	2.54
Miscellaneous: —										
Monson Hospital,	43	145	3.37	40	86	2.15	83	231	165	2.52
Foxborough Hospital,	21	61	2.90	21	61	2.90	21	61	85	1.93
School for the Feeble-minded,	24	72	3.00	133	263	1.98	157	335	254	2.75
Totals,	88	278	3.16	173	349	2.02	261	627	504	2.54
Aggregates,	563	2,021	3.59	782	1,781	2.28	1,345	3,802	2,663	2.54

THE CAPACITY FOR PATIENTS

in all the institutions Dec. 1, 1910, was 13,505, compared with 13,149 the previous year, an increase of 356 beds. The whole number of patients in them was 14,256, compared with 13,399 the previous year, an increase of 857. Hence there is a deficiency of provision for 751 patients, or 5.56 per cent.

THE CAPACITY FOR THE INSANE

in State institutions Dec. 1, 1910, was 10,859, an increase of 94 beds. The whole number of patients in them was 11,691, compared with 11,229 the previous year, an increase of 462. Hence there is a deficiency of provision for 832 patients, or 7.66 per cent.

Work was in progress at the close of the year or appropriations had been granted for 928 new beds for the insane, 150 beds for the feeble-minded,—a total of 1,078 prospective beds, compared with 580 the previous year. Of these, 292 will become available for the insane the coming year, and all of those for the feeble-minded.

Working Capacities of Institutions.

INSTITUTIONS.		WORKING CAPACITIES, 1911.			
		MEN.		WOMEN.	
		Dec. 1, 1910.	Increase for the Year.	Dec. 1, 1910.	Increase for the Year.
				TOTALS.	
				Dec. 1, 1910.	Increase for the Year.
The insane: —					
State hospitals: —					
Worcester,		646	—	655	4 ¹
Taunton,		506	2	424	4
Northampton,		426	—	392	—
Danvers,		584	—	776	—
Westborough,		402	—	643	64
Boston,		310	20	450	16
Totals,		2,874	22	3,340	60
State asylums: —					
Worcester,		488	1	503	—
Medfield,		637	—	906	5
Gardner Colony,		391	—	189	5
Totals,		1,516	1	1,598	10
Hospitals and asylums,		4,390	23	4,938	70
Mental wards, State Infirmary,		177	—	496	1
Bridgewater Hospital,		662	—	—	—
Foxborough Hospital (insane),		196	—	—	—
Totals,		1,035	—	496	1
Total insane,		5,425	23	5,434	71
Miscellaneous: —					
Monson Hospital,		432	79	421	75
Foxborough Hospital (inebriate),		103	—	—	—
School for the Feeble-minded at Waltham,		898	102	542	6
Wrentham School,		150	—	100	—
Totals,		1,583	181	1,063	81
Aggregates,		7,008	204	6,497	132

1 Decrease.

Working Capacities of Institutions — Concluded.

INSTITUTIONS.	NUMBER OF PATIENTS DEC. 1, 1910.			Increase for the Year.	EXCESS OF PATIENTS.				
	Men.	Women.	Totals.		Number of Men.	Number of Women.	TOTALS.		
							Number.	Percentage.	
The insane: —									
State hospitals: —									
Worcester,	699	674	1,373	81	53	19	72	5.53	
Taunton,	510	476	986	23 ¹	4	52	56	6.02	
Northampton,	439	430	869	71	13	33	51	6.23	
Danvers,	623	862	1,485	81	39	86	125	9.19	
Westborough,	426	648	1,074	62	24	5	29	2.78	
Boston,	349	482	831	48	39	32	71	9.34	
Totals,	3,046	3,572	6,618	242	172	232	404	6.50	
State asylums: —									
Worcester,	498	593	1,091	66 ¹	10	90	100	10.09	
Medfield,	720	1,002	1,722	154	83	96	179	11.60	
Gardner Colony,	417	208	625	50	26	19	45	7.76	
Totals,	1,635	1,803	3,438	138	119	205	324	10.40	
Hospitals and asylums,	4,681	5,375	10,056	380	291	437	728	7.80	
Mental wards, State Infirmary,	201	512	713	12	24	16	40	5.94	
Bridgewater Hospital,	713	—	713	65	51	—	51	7.70	
Foxborough Hospital (insane),	209	—	209	5	13	—	13	6.63	
Totals,	1,123	512	1,635	82	88	16	104	6.79	
Total insane,	5,804	5,887	11,691	462	379	453	832	7.66	
Miscellaneous: —									
Monson Hospital,	426	377	803	102	61	44 ¹	501	5.86 ¹	
Foxborough Hospital (inebriate),	145	—	145	48	42	—	42	40.78	
School for the Feeble-minded at Waltham,	823	555	1,378	823	75 ¹	13	62 ¹	4.31 ¹	
Wrentham School,	133	106	239	194	171	6	111	4.40 ¹	
Totals,	1,527	1,033	2,565	395	561	251	811	3.06 ¹	
Aggregates,	7,331	6,925	14,256	857	323	428	751	5.56	

¹ Decrease.

THE ALLEGED INSANE, FEEBLE-MINDED AND EPILEPTIC
IN ALMSHOUSES AND IN THE COMMUNITY.

The tentative arrangement has been continued with the State Board of Charity relative to the visitation of alleged insane, feeble-minded or epileptic persons who may be cared for in almshouses or private families under public support.

Four such cases were reported by the Board of Charity, and investigated by a medical officer of the Board of Insanity. Commitment was recommended in 2 cases. Action was not deemed necessary in the remaining cases.

In addition, investigation was made with regard to the care of 27 other such persons in almshouses and private families. Commitment was recommended in 27 cases. Twenty-five were committed, but in the others no action has yet been taken.

Nine visits were made to almshouses for special investigation by a medical officer of the Board.

TABLES.

The following tables contain the information most frequently published and most extensively used in the compilation of general facts about the institutions under supervision of the Board. Many of the tables heretofore published have this year been omitted from this report. The unpublished tables, however, are all on file at the office of the State Board, and are available for the use of those interested.

TABLE 1. — *Classes of Persons under Supervision, their Number and Location, Oct. 1, 1910, and their Increase for the Year.*

	NUMBER.		INCREASE FOR THE YEAR.		NON-RESIDENT.		EPILEPTIC.		CRIMINAL.		OTHER CLASSES.										TOTAL INMATES.	
											VOLUNTARY.				TEMPORARY CARE.		INEBRIATES.					
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.				
																			MENTAL.		NON-MENTAL.	
																			Males.	Females.	Totals.	Males.
A. — Insane: —																						
Public institutions: —																						
Worcester Hospital,	694	679	1,373	36	63	99	29	20	49	7	15	22	—	—	—	—	—	—	—	694	690	1,384
Taunton Hospital,	540	468	1,008	4	14	18	29	5	34	4	4	4	—	1	1	—	—	—	—	540	471	1,011
Northampton Hospital,	433	418	851	21 ¹	13 ¹	34 ¹	27	14	41	1	1	1	—	3	4	—	—	—	—	433	421	855
Danvers Hospital,	626	848	1,474	40	14	54	9	13	22	3	7	10	—	—	—	—	—	—	—	627	856	1,483
Westborough Hospital,	400	617	1,017	25	24	49	3	7	10	8	8	16	1	2	4	6	10	14	14	404	637	1,041
Boston Hospital,	376	475	851	44	17	61	1	12	15	27	3	1	4	—	—	—	—	—	—	384	477	861
Mental wards, State Infirmary,	201	519	720	5	11	16	—	15	18	33	—	—	—	—	—	—	—	—	—	201	519	720
Worcester Asylum,	508	593	1,101	36 ¹	9	27 ¹	77	38	115	7	12	19	—	—	—	—	—	—	—	508	593	1,101
Medfield Asylum,	688	1,012	1,700	53	70	123	39	39	78	8	10	18	—	—	—	—	—	—	—	688	1,012	1,700
Gardner Colony,	418	207	625	30	13	43	—	2	1	3	—	—	—	—	—	—	—	—	—	418	207	625
Monson Hospital,	175	182	357	10	18	28	—	175	182	357	—	—	—	—	220	193	413	—	—	395	375	770
Bridgewater Hospital,	708	—	708	74	—	74	—	22	—	687	—	687	—	—	—	—	—	—	—	708	—	708
Foxborough Hospital,	194	—	194	15 ¹	—	15 ¹	—	—	—	—	—	—	—	—	—	—	—	—	—	303	—	303
Totals,	5,961	6,018	11,979	249	489	738	444	353	797	717	50	767	—	—	—	—	—	—	—	6,304	6,258	12,562
Family care,	14	261	275	4	30	34	—	—	1	—	—	—	—	—	—	—	—	—	—	14	261	275
Totals, public,	5,975	6,279	12,254	253	519	772	444	354	798	717	50	767	—	—	—	—	—	—	—	6,318	6,519	12,837
Private institutions: —																						
McLean Hospital,	88	128	216	5 ¹	3	21	16	26	42	—	3	3	—	—	1	—	—	—	—	89	128	217
Smaller institutions,	22	82	104	2	11	13	4	16	20	1	2	3	—	—	2	10	12	10	41	36	133	169
Totals, private,	110	210	320	3 ¹	2	11	20	42	62	1	5	6	—	—	3	10	13	10	41	125	261	386
Totals, public and private,	6,085	6,489	12,574	250	522	772	445	359	804	717	50	767	—	—	228	213	441	10	41	6,443	6,780	13,223

¹ Decrease.² Includes 2 males, 8 females placed in family care by trustees.

TABLE 1. — *Classes of Persons under Supervision, etc. — Concluded.*

	NUMBER.			INCREASE FOR THE YEAR.			NON-RESIDENT.			EPILEPTIC.			SCHOOL.			CUSTODIAL.			OTHER CLASSES.			TOTAL INMATES.		
	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.
B. — Feeble-minded: —																								
School for the Feeble-minded at Waltham,	801	552	1,353	131	351	481	21	15	36	18	12	30	403	202	605	398	350	748	—	—	—	801	552	1,353
Wrentham School,	114	100	214	72	100	172	—	—	—	—	—	—	48	33	81	66	67	133	—	—	—	114	100	214
Hospital Cottages for Children,	6	11	17	1	1	2	—	—	—	—	—	—	3	3	6	3	3	8	—	—	—	78	60	138
Elm Hill Institution,	40	13	53	51	1	51	29	9	38	4	2	6	20	10	30	20	3	23	—	—	—	40	13	53
Terrace Home School,	6	4	10	6	4	10	—	—	—	—	—	—	2	3	5	4	4	5	—	—	—	6	4	10
Alms-houses, ²	107	92	199	131	4	171	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	107	92	199
Totals, feeble-minded,	1,074	772	1,846	48	66	114	50	24	74	22	14	36	476	251	727	491	429	920	72	49	121	1,146	821	1,967
C. — Inebriates: —																								
Foxborough Hospital,	109	—	109	17	—	17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Insane hospitals,	—	35	35	—	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Private institutions,	2	—	2	21	—	21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals, inebriates,	111	35	146	15	5	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
D. — Epileptics: —																								
Monson Hospital,	395	375	770	27	48	75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
State hospitals,	115	190	305	31	2	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
State asylums,	155	96	251	21	3	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
School for the Feeble-minded at Waltham,	18	13	30	31	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hospital Cottages for Children,	63	38	101	5	2	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Family care,	1	1	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Private institutions,	5	9	14	11	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals, epileptics,	751	606	1,357	23	59	82	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Whole number of persons under supervision,	7,589	7,601	15,190	350	364	714	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Viz.: insane, feeble-minded, epileptic and inebriate,	7,554	7,529	15,083	335	374	709	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Voluntary mental patients (sane),	7	20	27	5	51	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Temporary care,	9	2	11	9	2	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other classes,	19	50	69	1	71	61	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

¹ Decrease.² Figures taken from reports of overseers of poor, March 31, 1910.

TABLE 2. — Admissions, Discharges, etc., of the Insane in Institutions and boarded in Private Families for the Year ending Sept. 30, 1910.

	Worcester Hospital.	Taunton Hospital.	Northampton Hospital.	Danvers Hospital.	Westborough Hospital.	Boston Hospital.	Mental State Infirm.	Worcester Asylum.	Medford Asylum.	Gardner Colony.
Remaining Sept. 30, 1909,										
Men,	1,274	990	885	1,420	968	790	704	1,128	1,577	582
Women,	658	536	454	586	375	332	196	544	635	388
Men,	616	454	431	834	593	458	508	584	942	194
Admitted within the year,										
Men,	651	574	377	616	673	487	170	65	221	112
Women,	343	300	190	341	292	188	66	6	95	79
By commitment,	308	274	187	275	381	299	104	60	126	33
Men,	568	481	330	519	491	407	76	—	—	—
Women,	304	263	172	278	217	161	32	—	—	—
By transfer,	264	218	158	241	274	246	44	—	—	—
From visit,	11	14	4	27	30	13	67	61	216	100
From escape,	3	7	6	5	33	9	1	2	—	1
Nominally for discharge,	4	1	2	3	2	3	25	—	—	3
Whole number of cases within the year,	65	71	35	62	117	55	—	3	4	8
Dismissed within the year,										
Men,	552	558	411	562	624	426	154	93	98	69
Women,	307	296	211	301	267	267	61	42	42	49
Viz.: Discharged,	245	260	200	261	357	282	93	51	56	20
Men,	228	181	140	237	251	139	40	7	9	14
Women,	112	93	62	136	102	45	18	3	2	10
Recovered,	116	88	78	101	149	94	22	4	7	4
Men,	60	59	33	59	103	43	2	—	—	4
Women,	27	28	11	33	40	14	2	—	—	3
Capable of self-support,	33	37	22	26	63	29	—	—	—	1
Improved,	66	41	44	55	40	18	7	2	1	2
Not improved,	29	45	47	70	42	53	15	4	3	3
Not insane,	72	27	16	50	66	23	16	1	5	5
	1	3	—	3	—	2	—	—	—	—

Died.	178	148	87	207	110	153	75	63	76	16
Men.	110	81	54	116	60	67	31	29	34	10
Women.	68	67	33	91	50	86	44	34	42	6
Transferred.	68	136	114	47	104	46	24	13	6	28
On visit Sept. 30, 1910.	59	82	58	61	150	84	7	3	5	5
On escape Sept. 30, 1910.	19	9	12	10	9	4	6	3	2	6
Remaining Sept. 30, 1910.	1,373	1,008	851	1,474	1,017	851	720	1,101	1,700	625
Men.	694	540	433	626	400	376	201	508	688	418
Women.	679	468	418	848	617	475	519	593	1,012	207
Supported by the State.	1,121	832	648	1,205	729	739	713	1,073	1,656	617
Reimbursing.	102	72	87	140	79	35	7	28	44	8
Private.	150	104	116	129	209	77	-	-	-	-
Daily average number.	1,342.45	982.18	848.37	1,413.52	1,006.04	812.66	715.50	1,129.36	1,633.15	602.98
State.	1,074.30	804.54	640.77	1,148.03	725.31	690.65	708.62	1,083.02	1,588.91	591.02
Reimbursing.	112.61	79.15	89.90	130.82	83.55	39.59	6.88	46.24	44.24	11.96
Private.	155.54	98.49	117.70	134.67	197.18	82.42	-	-	-	-
Persons first admitted to any insane hospital.	462	380	264	427	371	330	67	-	-	-
Men.	245	207	142	233	169	139	25	-	-	-
Women.	217	173	122	104	202	191	42	-	-	-
Recent (insane less than one year).	227	139	160	236	243	202	38	-	-	-
Chronic (insane one year or more).	196	125	103	167	83	112	20	-	-	-
Unknown.	39	116	1	24	45	16	9	-	-	-
Persons admitted from the community.	568	476	329	516	488	405	76	-	-	-
Viz.: From cities and large towns.	468	318	261	456	351	401	66	-	-	-
From country districts.	100	158	68	60	137	4	10	-	-	-
Whole number of persons within the year.	1,858	1,482	1,222	1,966	1,509	1,214	847	1,191	1,796	685
Whole number of persons admitted within the year.	586	498	340	551	553	430	143	63	217	104
Whole number of persons dismissed within the year.	487	477	374	498	506	370	129	90	92	61

TABLE 2. — Admissions, Discharges, etc., of the Insane in Institutions and boarded in Private Families for the Year ending Sept. 30, 1910 — Concluded.

	Monson Hospital.	Bridgewater Hospital.	Foxborough Hospital.	Total Public Institutions.	Family Care.	Total Public.	McLean Hospital.	Smaller Institutions.	Total Private.	Total Public and Private.
Remaining Sept. 30, 1909, Men,	329	634	209	11,490	241	11,731	217	103	320	12,051
Women,	164	634	209	5,712	10	5,722	93	30	113	5,835
				5,778	281	6,059	124	83	207	6,216
Admitted within the year, Men,	66	146	22	4,181	79	4,260	174	151	325	4,585
Women,	36	146	22	2,104	8	2,112	81	46	127	2,239
By commitment,	30	134	—	2,077	71	2,148	93	105	198	2,346
Men,	56	134	—	3,062	—	3,062	154	134	288	3,350
Women,	30	134	—	1,591	—	1,591	71	39	110	1,701
By transfer,	26	4	—	1,471	—	1,471	83	95	178	1,649
From visit,	4	4	16	567	75	642	7	16	23	665
From escape,	5	—	1	72	—	72	3	1	4	76
Nonnaturally for discharge, Men,	1	—	—	22	—	22	—	—	—	22
Women,	—	8	5	453	4	462	10	—	10	472
Whole number of cases within the year, Men,	395	780	231	15,671	320	15,991	391	254	645	16,636
Women,	38	72	37	3,692	45	3,737	175	150	325	4,062
Discharged,	26	72	37	1,855	4	1,859	86	44	130	1,989
Men,	12	42	—	1,837	41	1,878	89	106	195	2,073
Women,	7	42	8	1,303	9	1,312	117	114	231	1,543
Viz.: Discharged, Men,	5	42	8	638	4	642	57	35	92	734
Women,	2	7	—	665	5	670	60	79	139	809
Recovered, Men,	—	7	—	370	—	370	37	34	71	441
Women,	—	7	—	165	—	165	18	11	29	194
Capable of self-support, Men,	—	—	—	205	—	205	19	23	42	247
Women,	—	10	—	292	7	299	18	3	21	320
Improved, Men,	7	4	8	330	2	332	33	32	65	397
Not improved, Men,	—	21	—	302	—	302	29	45	74	376
Not insane, Men,	—	—	—	9	—	9	—	—	—	9

Died,	23	22	21	1,179	—	1,179	16	15	31	1,210
Men,	14	22	21	649	—	649	7	5	12	661
Women,	9	—	—	530	—	530	9	10	19	549
Transferred,	—	1	3	590	36	626	22	17	39	665
On visit Sept. 30, 1910,	8	7	4	539	—	539	19	4	23	562
On escape Sept. 30, 1910,	—	—	1	81	—	81	1	—	1	82
Remaining Sept. 30, 1910,	357	708	194	11,979	275	12,254	216	104	320	12,574
Men,	175	708	194	5,975	14	5,975	88	22	110	6,085
Women,	182	—	—	6,018	261	6,279	128	82	210	6,489
Supported by the State,	337	706	188	10,564	228	10,792	—	—	—	10,792
Reimbursing,	13	2	6	623	9	632	—	—	—	632
Private,	7	—	—	792	38 ¹	830	216	104	320	1,150
Daily average number,	342.26	661.47	204.94	11,694.78	241.72	11,936.50	221.10	108.59	329.09	12,266.19
State,	325.51	655.33	199.13	10,235.64	207.02	10,442.66	—	—	—	10,442.66
Reimbursing,	9.57	5.64	5.81	665.96	4.77	670.73	—	—	—	670.73
Private,	7.18	—	—	793.18	29.93	823.11	221.10	108.59	329.69	1,152.80
Persons first admitted to any insane hospital,	52	117	—	2,470	—	2,470	112	95	207	2,677
Men,	27	117	—	1,304	—	1,304	51	30	81	1,385
Women,	25	—	—	1,166	—	1,166	61	65	126	1,292
Recent (insane less than one year),	52	37	—	1,334	—	1,334	84	69	153	1,487
Chronic (insane one year or more),	—	77	—	883	—	883	28	25	53	936
Unknown,	—	3	—	253	—	253	—	1	1	254
Persons admitted from the community,	56	134	—	3,040	—	3,040	152	130	271	3,291
Viz.: From cities and large towns,	35	107	—	2,455	—	2,455	115	108	215	2,652
From country districts,	21	27	—	585	—	585	37	22	56	639
Whole number of persons within the year,	389	772	226	14,643	312	14,854	379	245	604	15,375
Whole number of persons admitted within the year,	66	138	17	3,134	75	3,134	162	147	275	3,389
Whole number of persons dismissed within the year,	33	64	32	2,621	40	2,625	163	146	266	2,878

¹ Includes 24 self-supporting and 3 living with friends without public aid.

TABLE 3. — *Statistical Form for State Institutions, etc.* — Concluded.

INSTITUTIONS.	EXPENDED.							Grand Totals.
	CURRENT EXPENSES.							
	Salaries and Wages.	Clothing.	Subsistence.	Ordinary Repairs.	Office, Domestic and Outdoor Expenses.	Total.	New Buildings, Permanent Improvements, Land, etc.	
Worcester State Hospital,	\$110,542 58	\$12,852 24	\$80,012 90	\$18,477 73	\$76,487 46	\$298,372 91	\$2,114 90	\$300,487 81
Taunton State Hospital,	99,406 88	6,092 96	59,587 44	6,323 71	64,587 63	235,998 62	14,411 33	250,409 95
Northampton State Hospital,	64,174 84	3,869 02	46,904 97	9,320 96	47,043 35	171,313 14	787 93	172,101 07
Danvers State Hospital,	123,690 29	16,600 48	72,381 30	32,556 38	75,269 53	320,497 98	7,566 20	328,064 18
Westborough State Hospital,	120,162 24	6,515 53	60,046 30	15,548 45	67,722 75	269,995 37	56,425 03	326,420 40
Boston State Hospital,	92,395 24	7,864 55	44,829 69	7,578 78	60,876 51	213,544 77	34,498 73	248,043 50
Worcester State Asylum,	104,698 08	11,875 65	62,127 78	9,425 84	63,193 07	251,320 42	57,491 55	308,811 97
Medfield State Asylum,	132,023 30	15,840 29	87,038 63	12,917 37	68,489 16	316,308 75	17,218 48	333,527 23
Gardner State Colony,	42,391 64	5,558 79	20,455 67	12,729 39	35,364 51	116,500 00	25,666 02	142,166 02
Monson State Hospital,	71,938 09	3,312 37	40,039 84	7,712 62	44,497 08	167,500 00	93,158 44	260,658 44
Foxborough State Hospital,	36,304 60	1,944 42	21,584 22	7,348 26	28,191 21	95,372 71	12,536 47	107,909 18
School for the Feeble-minded at Waltham,	106,593 61	16,373 41	63,837 88	16,547 79	68,259 11	271,611 80	4,937 76	276,549 56
Wrentham State School,	16,427 18	2,807 59	6,868 31	2,602 98	16,571 71	45,277 77	82,396 25	127,674 02
Totals,	\$1,120,748 67	\$111,507 30	\$665,714 93	\$159,090 26	\$716,553 08	\$2,773,614 24	\$409,209 09	\$3,182,823 33

THE STATE BOARD.

PROCEEDINGS.

Twenty-three Board meetings were held during the year.

Fourteen conferences with the trustees and superintendents of the different institutions were arranged to promote harmonious action with relation to appropriations, construction and general policy.

Twenty-eight visits of inspection to institutions were made by the Board, in addition to 400 by the executive officer, the deputy executive officer, the pathologist, assistant to the executive officer and the financial agent of the Board.

Careful attention has been paid to all complaints as to commitment, discharge or treatment of patients, whether originating with the latter or otherwise. Thirty-nine special investigations were made in regard to these and kindred matters relating to patients in institutions.

Licenses were granted during the year as follows: to Mabel D. Ordway, M.D., Edward Mellus, M.D., and Robert T. Edes, M.D., for the care and treatment of the insane, epileptic, feeble-minded and persons addicted to the intemperate use of narcotics or stimulants. The licenses of George B. Coon, M.D., and Arthur H. Ring, M.D., were extended to care for all of the above-named classes.

PLANS AND SPECIFICATIONS

have been examined and approved by the Board as follows:—

Taunton Hospital.—Two additions to main hospital building (chapter 156, Resolves of 1910) approved Dec. 8, 1909. Cow barn (chapter 114, Resolves of 1910) approved Dec. 8, 1909.

Danvers Hospital.—Reconstructing and enlarging laundry building (chapter 127, Resolves of 1910) approved Dec. 8, 1909; modifications approved Aug. 10, 1910.

Westborough Hospital.—Colony group of three one-story buildings (chapter 152, Resolves of 1910) approved Dec. 8, 1909; modifications approved Aug. 10, 1910. Sewage reservoir

(chapter 131, Resolves of 1910) approved Dec. 8, 1909. Sanatorium for tuberculous women (chapter 131, Resolves of 1910) approved Dec. 8, 1909.

Boston Hospital. — Infirmary buildings (chapter 644, Acts of 1910) approved Dec. 8, 1909; modifications approved July 13, 1910. Extension to present laundry (chapter 644, Acts of 1910) approved Dec. 8, 1909. An addition to Butler building (chapter 644, Acts of 1910) approved Dec. 8, 1909.

Worcester Asylum. — Additions to and alterations of existing buildings (chapter 125, Resolves of 1910) approved Dec. 8, 1909. Two one-story wooden buildings (chapter 155, Resolves of 1910) approved Dec. 8, 1909.

Medfield Asylum. — Laundry (chapter 151, Resolves of 1910) approved Dec. 8, 1909; modifications approved Sept. 14, 1910.

Gardner Colony. — Building for female patients (chapter 75, Resolves of 1910) approved Dec. 8, 1909. House for employees (chapter 75, Resolves of 1910) approved Dec. 8, 1909.

Monson Hospital. — Extension of sewerage system (chapter 119, Resolves of 1910) approved Dec. 8, 1909. House for employees (chapter 119, Resolves of 1910) approved Dec. 8, 1909.

Wrentham School. — Building for custodial patients (chapter 149, Resolves of 1910) approved Dec. 8, 1909; modifications approved Oct. 5, 1910. House for employees (chapter 149, Resolves of 1910) approved Dec. 8, 1909. Cow stable, hay barn and silo (chapter 80, Resolves of 1910) approved Dec. 8, 1909.

FINANCIAL STATEMENT.
Financial Statement of the Board for the Fiscal Year ending Nov. 30, 1910.

	APPROPRIATIONS AND RECEIPTS.					Totals.
	Appropriations.	CASH RECEIPTS ON ACCOUNT OF —				
		Family Care.	State Institutions.	Refunds.	Interest on Bank Account.	
Traveling, office and contingent expenses,	\$8,000 00	-	-	\$8 00	-	\$8,008 00
Salaries and wages of officers and employees,	36,900 00	-	-	25 28	-	36,925 28
Transportation and medical examination of State charges,	11,500 00	-	-	61 85	-	11,561 85
Support of State charges boarded out in families,	35,000 00	-	-	-	-	35,000 00
Support of State charges in Hospital Cottages for Children,	11,500 00	-	-	-	-	11,500 00
Cash received in reimbursement for the support of patients,	-	\$616 65	\$36,248 60	74 00	\$54 68	36,993 93
	\$102,900 00	\$616 65	\$36,248 60	\$169 13	\$54 68	\$139,989 06

Financial Statement of the Board for the Fiscal Year ending Nov. 30, 1910 — Concluded.

	EXPENDITURES AND REMITTANCES.				
	Expenditures from Appropriations.	Balance.	Paid to State Institutions.	Paid to State Treasurer.	Totals.
Traveling, office and contingent expenses,	\$7,727 42	\$280 53	-	-	\$8,008 00
Salaries and wages of officers and employees,	36,766 85	153 43	-	-	36,925 28
Transportation and medical examination of State charges,	11,230 56	331 29	-	-	11,561 85
Support of insane charges boarded out in families,	33,261 59	1,738 41	-	-	35,000 00
Support of State charges in Hospital Cottages for Children,	12,641 03	1,141 03 ¹	-	-	11,500 00
Payments of cash received in reimbursement for the support of patients,	-	-	\$36,003 00	\$990 93	36,993 93
	\$101,627 45	\$1,367 68	\$36,003 00	\$990 93	\$139,989 06

¹ Overdrawn.

THE SUPPORT DEPARTMENT

takes a history at the hospitals of every patient committed as a public charge, and supplements this history by visits to relatives and others to ascertain, first, if the patient has a legal claim upon Massachusetts for support; and, second, if so, whether the patient, or any one legally liable under the law, is of sufficient ability to support.

If the patient has no claim for support upon this State, and our investigations show that he has a claim upon some other State or country, the case is referred to the deportation department of the Board, with a complete history showing where the patient belongs, with the statement that the patient has no settlement in Massachusetts.

If the patient has a legal claim in this State, and our investigations show that he or those legally liable for his maintenance are able to support him privately, the case is reported to the hospital, and the rate of board is determined by the hospital authorities and the bills for board are made and collected by the hospital. If the patient again becomes a public charge, and it is reported to the Board by the hospital, the case is again taken up.

If our investigations show that a patient cannot be made private, but has sufficient means to reimburse the State in part for his support, the amount of the reimbursement which can be secured is submitted to the Board for their approval under the provisions of section 80, chapter 504 of the Acts of 1909, which provide that the price of support of State charges shall be determined by the State Board of Insanity at a sum not exceeding \$5 per week. In determining the amount to be paid in reimbursing cases, the age of the patient and the number and condition of those dependent upon him for support are important factors, and are always taken into consideration in recommending the rate to be fixed by the Board.

In some cases where there are sufficient means to reimburse it is necessary that a guardian be appointed. If there is a relative willing to act, he is advised to petition the probate

court for his appointment, and when appointed the matter of support is taken up with him. In cases where there are no relatives, the Board is requested to petition the probate court under the provisions of section 99 of chapter 504 of the Acts of 1909 for the appointment of a suitable person as guardian.

The law of 1909 concerning the appointment of guardians provides that seven days' notice of the time and place appointed for the hearing shall be given to the Board of Insanity, and further provides that a copy of such appointment, when made, shall be sent by mail by the register of probate to the Board. It also provides that a guardian shall give notice to the Board of a petition to sell real estate, and all similar matters.

These provisions of the law have been of great assistance to this department, enabling the State to secure reimbursement in many cases of which we should have had no knowledge prior to the passage of the law, and have increased materially the total receipts. Many times patients in the hospitals become entitled, through the death of a relative, to an interest in the estate of said relative. In some cases considerable sums of money are left to them. Unless left in trust, this money must be paid over to a duly appointed guardian. Under the provisions of the law above quoted the Board is kept in touch with all such matters. In many cases the State is the only party interested.

Bills in reimbursing cases are made quarterly in the office of the support department and are made payable to the hospitals. A schedule of the bills sent out is mailed to each hospital quarterly, and returned to the department at the end of the quarter with the payments made credited thereon. When a bill is two quarters in arrears, it is not again listed upon the schedule until a visitor from the office has called upon the person legally responsible for its payment and ascertained the reasons why the bill has not been paid. If satisfactory arrangements cannot be made for the settlement of the bill, and there is no question as to the financial ability of the party responsible, the Board is requested, as a last resort, to send the bill to the Attorney-General for such action as he may deem proper.

The following statement shows in detail the work for the year ending Nov. 30, 1910:—

Visits to the hospitals,	103	
Histories taken at the hospitals,	2,874	
Visits to relatives of patients and others for investigation,	1,501	
Cases submitted for deportation to the United States Commissioner of Immigration,	114	
Cases submitted for deportation by the Board,	204	
Cases pending Nov. 30, 1909,	328	
New cases,	667	
	—	995
Made private,	98	
Made reimbursing,	285	
Accepted as State charges,	181	
Pending Nov. 30, 1910,	431	
	—	995

Private Cases.

Cases pending Nov. 30, 1909,	12	
New cases reported to the hospitals,	105	
	—	117
Reported by hospitals as having been made private,	98	
Made reimbursing,	9	
Accepted as State charges,	2	
Pending,	8	
	—	117

Reimbursing Cases.

Cases remaining Nov. 30, 1909,	687	
New cases,	285	
	—	972
Made private of the above,	7	
Died,	97	
Discharged or on visit Nov. 30, 1910,	135	
Accepted as State charges,	54	
Remaining in hospitals Nov. 30, 1910,	679	
	—	972
Cases referred to the Attorney-General,	12	

Number and Board Rates of Reimbursing Patients for the Year ending Nov. 30, 1910.

INSTITUTIONS.	DAILY AVERAGE NUMBER.		Average Weekly Per Capita Rate.	NUMBER LEFT OCT. 1, 1910.		UNITED STATES DEPOR- TATION CASES.	
	Males.	Females.		Males.	Females.	Daily Aver- age Number.	Average Weekly Per Capita.
Worcester Hospital,	51.78	60.83	\$3 21	38	64	5.92	\$5.00
Taunton Hospital, .	48.20	30.95	3 21	38	34	2.39	5 00
Northampton Hospital, .	44.14	45.76	3 06	38	49	1.84	5 00
Danvers Hospital, .	52.40	78.42	3 16	58	82	4.74	5 00
Westborough Hospital,	23.17	60.38	3 15	21	58	3.01	5 00
Worcester Asylum, .	20.37	25.87	3 19	15	13	-	-
Medfield Asylum, .	15.45	28.79	2 77	16	28	-	-
Boston Hospital, .	12.13	27.46	3 11	10	25	.65	5 00
Monson Hospital, .	13.33	11.00	2 69	16	13	.08	5 00
Gardner Colony, .	10.75	1.21	3 02	6	2	-	-
State Infirmary, .	1.98	4.90	3 10	1	6	1.63	5 00
Foxborough Hospital,	5.92	-	2 82	7	-	-	-
Bridgewater Hospital,	5.64	-	3 02	2	-	.71	5 00
Hospital Cottages for Children,	2.23	-	2 12	3	-	-	-
School for the Feeble-minded,	1.00	6.03	2 69	1	1	.15	5 00
Family care, .	-	4.77	2 49	-	9	-	-
Totals,	309.00	386.37	\$3 10	270	384	21.12	-

Receipts for Support of Reimbursing Patients.

LOCATION OF PATIENTS.	Year ending Nov. 30, 1909.	Year ending Nov. 30, 1910.	Total since Jan. 1, 1904.
Worcester Hospital,	\$16,643 44	\$20,387 12	\$97,438 27
Taunton Hospital,	11,709 93	13,833 86	74,414 14
Northampton Hospital,	13,977 00	14,799 00	74,073 46
Danvers Hospital,	21,947 59	22,722 63	125,851 95
Westborough Hospital,	11,530 66	14,483 44	72,846 13
Boston Hospital,	6,037 75	6,574 23	22,063 89
Worcester Asylum,	5,219 31	7,659 12	33,643 58
Medfield Asylum,	7,390 24	6,370 39	45,306 74
Gardner Colony,	1,353 02	1,877 82	5,968 69
Mental wards, State Infirmary,	1,490 09	1,533 55	4,497 05
Bridgewater Hospital,	253 50	1,102 29	2,390 82
Monson Hospital,	3,535 66	3,418 98	12,116 80
Foxborough Hospital,	449 76	868 16	1,410 85
Massachusetts School for Feeble-minded,	127 21	1,021 93	1,149 14
Hospital Cottages for Children,	106 38	245 60	438 12
Family care,	697 03	616 65	4,324 69
Almshouses,	-	74 00	923 66
Totals,	\$102,468 57	\$117,588 91	\$578,857 98

Average Numbers and Percentages of State, Reimbursing and Private Patients during the Year ending Nov. 30, 1910.

	STATE.		REIMBURSING.		PRIVATE.		Total Average Number.
	Average Number.	Percentage.	Average Number.	Percentage.	Average Number.	Percentage.	
Insane:—							
Public institutions,	10,424	87.66	666	5.60	801	6.74	11,891
Family care,	233	94.33	5	2.02	9	3.65	247
Totals, public,	10,657	87.80	671	5.53	810	6.67	12,138
Private institutions,	-	-	-	-	393	-	393
Totals, public and private,	10,657	85.05	671	5.35	1,203	9.60	12,531
Other classes:—							
Public institutions,	2,011	94.24	24	.12	99	4.64	2,134
Private institutions,	-	-	-	-	57	-	57
Totals, public and private,	2,011	91.97	24	1.09	156	7.12	2,191
Insane and other classes,	12,668	86.05	695	4.72	1,359	9.23	14,722

DEPORTATION.

The statutes provide that "The board may also remove any pauper inmates of institutions under its supervision to any country, state or place where they belong." In pursuance of this authority an agent of the Board investigates the case of each person committed as a public charge, to determine his right to support by the State. If a person is found to have no settlement, and his residence in the State has not been of sufficient length for him to have gained a strong claim to State support, the investigation is extended to determine his place of residence outside the State. If his mental and bodily condition permit, the patient is sent to relatives at his place of residence when suitable arrangements to do so can be made. If conditions do not permit sending him to relatives, or if he requires further hospital care, the matter is taken up with either the local or State authorities where he belongs, with a request that he be received and provided for.

In sending patients to their friends or to the authorities in other States, an agent of the Board accompanies each person and places him in responsible hands.

All female patients are sent attended by a woman.

In sending patients to transatlantic countries, arrangements are made when possible for some friend to accompany them, but when this cannot be done they are placed in charge of the ship's surgeon, and are sent in the hospital under the direct care of a steward. to the ship's foreign port, and thence forwarded to their homes in charge of caretakers secured by the steamship company.

All expenses for travel and attendance are borne by the State, but as most of the persons so sent would probably be State charges for many years if allowed to remain here, the money spent for their deportation is profitably invested.

The Board is often asked to receive from other States insane persons who are alleged to belong in this Commonwealth. The histories of such persons are carefully traced, and if found to belong here they are accepted for care in our institutions, pro-

vided the State desiring to send them will agree to receive similar cases from Massachusetts.

Alien inmates of institutions who have been in the country less than three years, and are found to be liable to deportation under the United States immigration laws, are reported to the Commissioner of Immigration for the port of Boston for his action.

There were considered for deportation 397 cases, compared with 365 for the previous fourteen months. The Board deported 63 to other States, 79 to other countries, — in all, 142. In addition, the United States Immigration Commissioner deported 82. Altogether, 224 have been deported since Dec. 1, 1910.

Since Oct. 1, 1898, 1,445 persons have been deported by the Board, of whom 42 returned once and 11 twice. Of those returning, 12 are now in institutions in this State.

Details of the disposition of cases under consideration for deportation are shown in the following table: —

	STATE BOARD.			UNITED STATES IM- MIGRATION COMMISSIONER.			TOTALS.			TOTALS.		
	Men.	Women.	Totals.	Men.	Women.	Totals.	Men.	Women.	Totals.	1909. (14 Mos.)	1910.	Increase.
Cases pending Nov. 30, 1909,	37	18	55	6	7	13	43	25	68	59	68	9
Since reported by support agent,	155	71	226	63	40	103	218	111	329	306	329	23
Total cases under consideration,	192	89	281	69	47	116	261	136	397	365	397	32
Deported,	94	48	142	46	36	82	140	84	224	235	224	11
Viz.: Other States,	40	23	63	—	—	—	40	23	63	55	63	8
Viz.: Other countries,	54	25	79	46	36	82	100	61	161	180	161	19
Discharged,	13	—	13	1	—	1	14	—	14	17	14	3
Viz.: Care of friends,	8	—	8	1	—	1	9	—	9	12	9	3
Viz.: Escaped,	5	—	5	—	—	—	5	—	5	5	5	—
Died,	3	—	3	1	1	2	4	1	5	7	5	2
Returned to penal institutions,	—	—	—	—	—	—	—	—	—	1	—	1
Withdrawn,	1	1	2	12	3	15	13	4	17	14	17	3
Viz.: Private patients,	1	1	2	—	2	2	—	3	4	1	4	3
United States cases,	—	—	—	—	—	—	—	—	—	2	—	2
Rejected by Immigration Commissioner,	—	—	—	12	1	13	12	1	13	11	13	2
Dropped from further consideration,	22	12	34	—	—	—	22	12	34	23	34	11
Viz.: Impracticable to deport,	9	10	19	—	—	—	9	10	19	11	19	8
No place to go,	13	2	15	—	—	—	13	2	15	12	15	3
Total cases closed,	133	61	194	60	40	100	193	101	294	297	294	3
Cases pending, Nov. 30, 1910,	59	28	87	9	7	16	68	35	103	68	103	35
Viz.: Under sentence,	17	—	17	—	—	—	17	—	17	13	17	4
Viz.: Not in condition to deport,	14	13	27	3	1	4	17	14	31	20	31	11
Awaiting action,	28	15	43	6	6	12	34	21	55	35	55	20

1 Decrease.

TRANSFERS.

Seven hundred and forty-four patients have been transferred within the year; 581 between public institutions; 111 between public institutions and families; 43 between public and private institutions; 9 between private institutions.

FINANCIAL DEPARTMENT.

METHODS OF WORK.

This department was established in June, 1906, to inquire into financial methods employed by the institutions under supervision by the Board. This inquiry involved accounting and buying, methods of distribution of supplies, grades and qualities of merchandise obtained, prices paid for similar grades, and comparative consumption.

Whole per capita cost is the common unit used in the comparison of institutions. It is, however, but the first step in the analysis of costs and results.

To separate it into its elements, showing the food per capita, clothing per capita, furnishings per capita, and, still finer, into the cost of the separate articles of food, clothing, furnishings, and so on through the list, was the first line of endeavor. Immediate difficulty was encountered in the great disparity in the methods of accounting and in the subject-matter covered by accounts.

Before proceeding it was necessary to remedy this, and now, through co-operation with the Auditor of the Commonwealth, the institutions are supplied with uniform and satisfactory office accounts pertaining to finance, and almost without exception with storeroom distribution accounts. This has taken some time and the steps have been gradual, but the results have greatly facilitated the analysis of per capita cost before spoken of. This analysis and the distribution for common use among the institutions of the results obtained continue an important part of the duties of this department.

As the analysis and comparison of items of expenditure pro-

ceeded it was disclosed that many grades and varieties of merchandise were bought, and that there prevailed little harmony in practice or thought as to which grade of many things commonly used throughout the institutions was most satisfactory for their needs.

A similar lack of uniformity appeared in the methods of buying, that is, by competitive bids, at times of depressed markets or the periodical renewal of supplies exhausted at the end of the week, month, etc. Much buying in small quantities and from retailers was also discovered.

In view of this disparity the idea was early conceived that a system of bulletins issued to each institution, which should contain a description of the articles bought by each, their grade, brand, character and price, would at least serve to give all the knowledge of what each was doing.

The steps preliminary to the issuance of these bulletins were as follows: a monthly visit by the financial agent to each institution, and the abstraction from the then current month's bills of the name of the concern of whom merchandise was bought, its grade, character, etc., together with the price. These abstracts of bills were taken to the office and from them a statement made out giving the average price per unit, *i.e.*, pound, quart, bushel, etc., paid by each institution, the brand name, grade, etc.

The information thus obtained was summarized on cards, one card for each article under consideration, and a set, comprising in all about fifty different articles, was issued monthly to every institution from which information had been collected relative to its purchases.

The effect of this was to excite discussion along the lines above indicated. If an institution found itself to be paying higher than the rest on a particular commodity, it immediately began to take measures to ascertain why. The causes involved differences in methods of purchasing, in grades and brands of goods.

The desire for knowledge on the part of each institution of what grades the others were buying, with whom they traded

the reason for the difference in prices, resulted, about a year after the bulletins were started, in a meeting of the stewards or purchasing agents of the various institutions. These meetings have been held monthly up to the present time, and have been attended by the financial agent of the Board. Meetings in the first place were devoted largely to the asking and answering of questions concerning brands bought, discussion of their relative merits, the names of the concerns of which goods were purchased, prices, etc.; and, to a lessened extent, this continues to the present time.

It developed that a part of the difference in price was due to the fact that some institutions received for prompt payment a discount of 1 to 3 or even 5 per cent., while others, having the same opportunity to avail themselves of this advantage, had not done so.

To remedy this a tabulation was made of all the concerns of which any institution obtained a discount, on what it was obtained and the reason for its being given. A copy of this tabulation was issued to each institution.

FLOUR.

Among the articles on which the institutions were most widely divergent in price and brand or quality, flour was found, by reason of its cost, to be perhaps as conspicuous as any. In an attempt to secure greater harmony in this matter, each institution was asked to furnish the name of the brand of flour commonly used by it, and the number of pounds of bread obtained per barrel, together with the price paid per barrel. These data were published, and resulted in much discussion at the stewards' meetings. As a result it became apparent that a difference in formulæ for making bread had much to do with the number of pounds obtained from a barrel and the cost per pound. Therefore the formulæ of the various institutions were collected and published, that all might have the benefit of the knowledge of each. The matter finally resolved itself into a selection of two brands which had produced the best results in bread, and to which were applied the formula which discussion and tests had disclosed to be the most satisfactory to all.

The object of this inquiry was to ascertain from what flour and formula a satisfactory bread might be obtained at the least cost per pound.

An illustration of the financial aspect of this matter may be seen in the following data:—

Maximum cost of flour per barrel as bought by the institutions,	\$5.92
Average cost of flour per barrel as bought by the institutions,	5.38
Minimum cost of flour per barrel as bought by the institutions,	4.85
Maximum cost of other ingredients except flour, . . .	\$1.92
Average cost of other ingredients except flour, . . .	.74
Minimum cost of other ingredients except flour, . . .	.16
Maximum pounds of bread obtained from a barrel. . .	317
Average pounds of bread obtained from a barrel, . . .	287
Minimum pounds of bread obtained from a barrel, . . .	240
Maximum cost of bread per pound,	\$0.0254
Average cost of bread per pound, . . . . .	.0208
Minimum cost of bread per pound, . . . . .	.0180

The approximate total bread consumption in all the institutions for a year is 5,267,175 pounds.

The difference in cost to the State between the most expensive bread and the average is \$24,229.

The difference in cost to the State between the least expensive and the average is \$14,748.

The difference in cost to the State between the least expensive and the most expensive is \$39,077.

From the above figures it may readily be deduced that the benefit to the Commonwealth in dollars and cents from the adoption of a uniform grade of flour and a formula for making bread far outweighs the time and labor consumed in discussion of the subject and investigation of the data collated.

Many modifications of formulæ have already resulted, and tests of flour are still being made.

SUGAR.

Another staple on which appeared a wide difference in price is granulated sugar. An investigation showed that in the six months' period, from Dec. 1, 1906, to May 1, 1907, out of a

total of eleven institutions five bought of grocers, retailers or jobbers at an average price of \$4.89 per hundred weight, and the other six of refineries, thereby obtaining the trade discount which the jobbers did not give. The difference in the average price per hundred weight was 23 cents in favor of refinery-bought sugar.

In this time the eleven institutions bought 214,510 pounds of sugar, or at the rate of 429,020 pounds per annum.

The cost to the State of this quantity bought of refineries is \$1,508 less than if the same amount were obtained of jobbers.

It may here be stated that there is now no institution which does not secure refinery discounts.

MEAT.

It became clear, as investigation proceeded, that the institutions which bought beef to the best advantage purchased the larger cuts, as sides, etc., and did their own meat cutting.

In 1907, 118,935 pounds of sides were bought. Publicity has so affected the procedure that in 1910, 314,415 pounds were bought.

COAL.

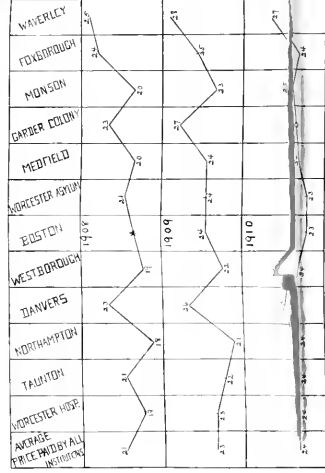
Coal has been thoroughly investigated. Many analyses of different grades, forms of contract, prices and freight conditions were issued in the annual bulletins to the several institutions.

The procedure as applied to the foregoing commodities is cited as being illustrative of the method of investigation pursued, the process of distributing the information obtained, and, in a measure, the effect created. It is, however, but a small part of the ground covered.

The following charts on eggs show the comparative prices paid by the institutions for the past three years, fluctuations in the market month by month and weekly per capita consumption for the same period. They are indicative of the method by which the institutions are compared relative to staple commodities.

PRICES PAID BY INSTITUTIONS FOR EGGS

CENTS PER DOZEN

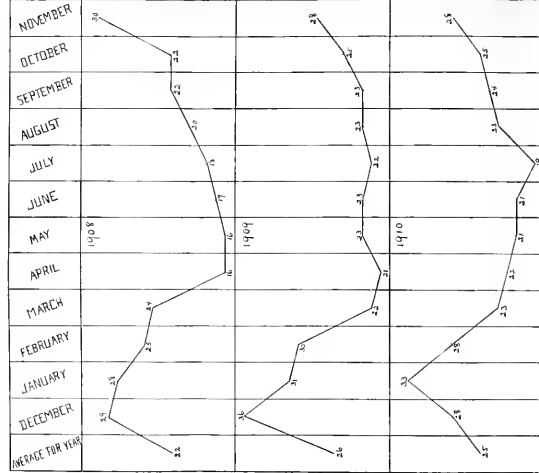


† NONE PURCHASED IN 1910

* DATA AT BOSTON NOT AVAILABLE

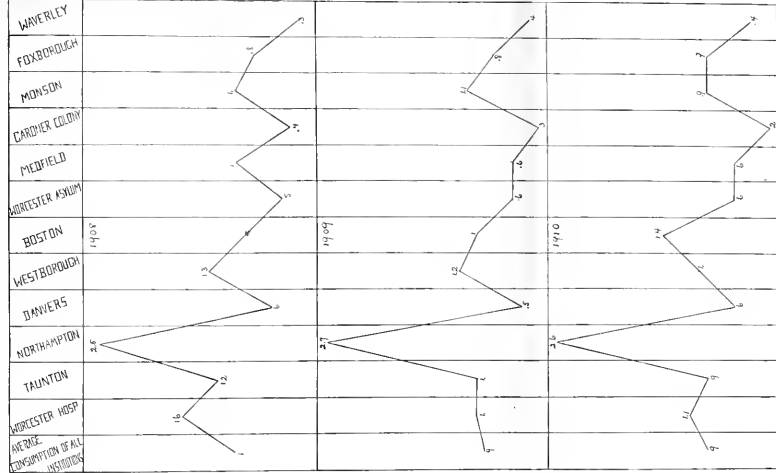
MARKET QUOTATIONS ON EGGS (WESTERN FIRSTS)

CENTS PER DOZEN

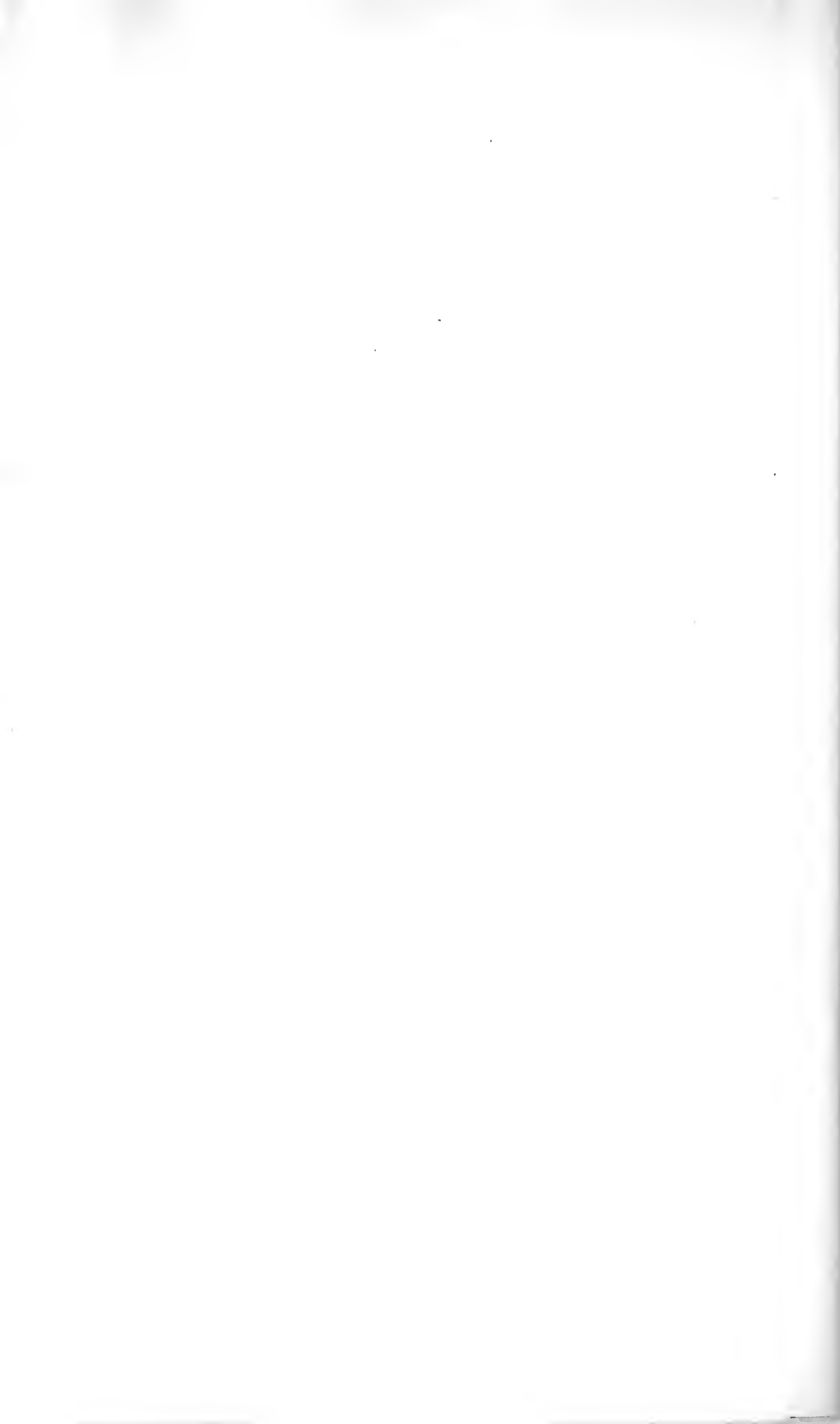


DAILY AVERAGE PER CAPITA CONSUMPTION OF EGGS

IN OUNCES



* DATA AT BOSTON NOT AVAILABLE



FARM, STABLE AND GROUNDS.

As the whole per capita cost was affected unequally by the amount produced on the several farms, it was found necessary to investigate to what extent this obtained in each institution. This inquiry involved an appraisal of such produce on a uniform basis. Therefore it has been the custom of this department to issue annually to each institution a tentative schedule of prices, asking suggestions for alterations. and, after these suggestions have been considered, to issue a final price list to be used in making a return to this Board of the value and quantity of its farm products.

CONSUMPTION AND COST TABLES.

Beginning with 1908 semiannual bulletins have been issued, giving, in addition to the average prices paid and the average per capita cost, the average per capita consumption. This information was not covered in the monthly bulletins, and indicates the comparative quantity of food given by the separate institutions.

The articles of diet covered were:—

Butter,	Total beef,
Butterine,	Lamb and veal,
Butter and butterine,	Pork,
Beans,	Poultry,
Cereals,	Total meat,
Eggs,	Milk,
White flour,	Molasses,
Flour,	Granulated sugar,
Fish,	Yellow sugar,
First cuts of beef,	Tea,
Second cuts of beef,	Coffee.
Sides of beef,	Potatoes.
Live beef,	

The following "butter" sheet is a sample of the form and information contained in each:—

BUTTER.

Purchases and Products for Fiscal Year ending Nov. 30, 1909.

INSTITUTIONS.	QUANTITY PURCHASED.		Average Rate per Pound.	Daily Average Per Capita (Ounces).	Daily Average Per Capita (Cost of Purchases).	Freight (Cost).
	Pounds.	Cost.				
Worcester Hospital, . .	59,088	\$14,614 61	\$0.247	1.714	\$0.026	-
Taunton Hospital, . .	36,825	9,718 16	.264	1.329	.021	\$71.76
Northampton Hospital, .	38,546	10,679 81	.277	1.690	.029	44.73
Danvers Hospital, . .	34,730	9,820 42	.283	.905	.016	.40
Westborough Hospital, . .	22,260	5,273 00	.237	.780	.012	25.80
Boston Hospital, . . .	14,193	3,853 84	.271	.661	.011	-
Worcester Asylum, . .	47,059	11,533 08	.245	1.543	.024	-
Medfield Asylum, . .	17,651	4,487 39	.254	.400	.006	64.64
Gardner Hospital, . . .	3,004	799 72	.266	.202	.003	4.35
Monson Hospital, . . .	25,110	7,049 82	.281	1.275	.022	9.34
Foxborough Hospital, . .	3,557	1,016 74	.286	.408	.007	7.56
School for Feeble-minded, .	15,647	4,830 92	.309	.450	.009	51.83

DIETARIES.

Beginning with 1909, compilations of the diets given for occasional weeks selected by the financial agent of the Board have been published from time to time, showing side by side the diets of each institution for the week selected. These tables are so bulky it would be impracticable to publish a sample.

FINANCIAL TABLES.

In its function of passing upon the estimates of money needed by the institutions for the ensuing year, the Board has found it necessary, in order to do so intelligently, to examine in much detail the finances of the preceding year.

Consequently, at the end of each year the institutions are requested to send in a financial statement on forms prepared by this department, giving their inventory, receipts and expenditures, appreciation and depreciation of property. These statements are checked up, analyzed and tabulated in detail under the following tables:—

Financial summary,	page 201
Inventory,	page 207
Receipts,	page 218
Expenses for maintenance,	page 226
Whole weekly per capita cost of support,	page 237
Receipts and expenses,	page 239
Expenses under special appropriations,	page 242
Comparative analysis of pay roll,	page 247
Rotation in service of employees,	page 161
State bond table,	page 254

CURRENT FISCAL YEAR.

During the fiscal year ending Nov. 30, 1910, monthly bulletins have been issued on —

Food.

Backs,	Game,	Potatoes,
Bacon,	Graham,	Rattles,
Beans,	Haddock,	Rice,
Bolted meal,	Hake,	Rolled oats,
Butter,	Halibut,	Rounds,
Butterine,	Ham,	Rumps and rounds,
Chicken,	Hinds,	Rye,
Chucks,	Hominy,	Salmon,
Clams,	Lamb and mutton,	Salt fish,
Coffee,	Live beef,	Salt pork,
Cod,	Loins,	Sausages,
Corn meal,	Mixed fish,	Scallops,
Cornstarch,	Molasses,	Sides,
Eggs,	Oatmeal,	Sugar,
Flour,	Oysters,	Tapioca,
Fores,	Plates,	Tea,
Fowl,	Pork shoulders,	Turkey,
Frankfurts,	Pollock,	Veal.

Hay and Grain.

Barley,	Gluten,	Oil cakes,
Bran,	Hay,	Oyster shells,
Brewery grain,	Linseed,	Provender,
Buckwheat,	Meal,	Straw,
Chicken feed,	Mixed cattle feed,	Wheat.
Corn,	Middlings,	
Cracked corn,	Oats,	

Branded Feeds.

Bibby,	Schumacher,	Unicorn,
Imperial,	Suerene,	Union grain,
Occident,	Sugarota,	Wyandotte.
Red Dog,	Ubiko,	

It has been the aim that these bulletins should be issued in thirty days from the end of the month in which the purchase was made, as the information appears to decrease in value in proportion as it is remote from the purchase date.

Beside the foregoing there have been issued,

Discounts.

A table giving in detail a list of the firms from which each institution had obtained discounts, the amount and the reason for its being given.

Dietaries.

Three times during the year a tabulation in detail of all food given to patients and employees for an elapsed week selected by the financial agent, without previous notice, together with a summary showing the number of times during the week the patients and employees have received butter, eggs, meat, fish, etc.

The periods covered have been weeks ending April 9. July 9 and October 16.

Farm, Stable and Grounds.

As in previous years, a list of prices for farm products, to be a uniform basis on which each institution shall make its return on farm, stable and grounds.

Consumption and Cost Table.

A table giving information relative to

Butter,	Eggs,
Butterine,	White flour,
Butter and butterine,	Fish (including oysters and clams),
Beans,	The various cuts of beef,
Cereals,	Sides of beef,

Live beef,	Molasses,
Beef as a total,	Coffee,
Pork,	Tea,
Poultry,	Granulated sugar,
Meat as a total,	Yellow sugar,
Milk,	Potatoes,

for each institution, showing the total quantity purchased in the year ending Nov. 30, 1910, the total cost, the average rate paid per unit, *i.e.*, pounds, barrels, etc., the average per capita cost, the amount produced on the institution farms, and, from the sum of the combined purchases and products, the derived average per capita consumption.

A table giving the same information for the six months' period ending May 31, 1910, except that the products of the farm are not included.

There is in preparation and about ready for issue a similar table for the year ending Nov. 30, 1910, in which the farm products are included, as in the first one mentioned.

Coal.

A coal table and statement of soft coal purchased, giving the following information relative to each institution: the merchants of whom bought, the brand of coal, number of tons purchased, price under the delivery conditions as prescribed in the contract, and description of such delivery conditions, a statement of the freight and teaming paid, the cost at a given point, *viz.*, tide-water, where all freight conditions are equal, the computed price at each institution, showing the effect of location on the price at a given point, and the date on which the contract was made.

FARM, PROFIT AND LOSS.

A statement showing the profit and loss on each institution farm was prepared for issue but not sent out, owing to the difficulty in making a separation between charges for farm maintenance from those for stable and grounds, the expenditures for these three having been intermingled into one classification known as "Farm, Stable and Grounds." The table contains the following data: —

Amounts paid during the year for —

Wages,

Other maintenance charges,

Cost of food for employees,

Offset by amounts credited for —

Produce consumed on institution table and sold,

Work done by farm employees,

Implements and stock of the farm used for other departments of the institution, and, after the difference in the inventory between the beginning and the end of the year had been taken into consideration, profit and loss.

Inventory.

In May each institution was asked to send in a description of its method of taking an inventory, beginning with the listing or scheduling of individual articles, and following the process through to the final summary of these articles and the affixation of value.

In every stage of taking an inventory different methods were found to be employed by the several institutions. In but few were the articles actually listed, but the quantity on hand of each and all commodities was estimated by various methods which did not involve counting them. The institutions held different opinions as to the distribution of articles under the several classifications, such as "Clothing and Clothing Material," "Furnishings," etc., so that these groups or classifications in separate institutions meant different things.

Placing a value on the articles after they were scheduled was another instance of widely divergent methods. In some institutions the cost, regardless of the age of an article, has been considered to be its value, while in others depreciation has been estimated, but in no two on the same basis. These different methods of scheduling and bases of appraising have greatly impaired the value of the inventories hitherto taken.

Accordingly, with the consent and co-operation of the Auditor of Accounts, printed inventories were prepared, in which every article found in five institutions was listed alphabetically under the appropriate class headings, resulting in a clear definition of each heading as "Furnishings," etc., to correspond with the same headings under expenditures.

This uniform inventory assures the accurate listing of articles and clearly defined classification. — two distinct advantages.

It was felt that a longer time than that available was needed to consider the adoption of a uniform basis for appraising or affixing the value of articles; also, that the question of depreciation was one which should be studied at some length. Therefore it was concluded that the institutions should continue to use such methods as had been in vogue with them in previous years, and that during the coming fiscal year a consultation should be had in which each institution should, through its representative, have an opportunity to express its opinion, and a method finally adopted which should be logical and satisfactory to all.

STEWARDS' MEETINGS.

The scope of the stewards' meetings has broadened greatly since their inception. Originally information was exchanged, opinions were expressed on brands, qualities, concerns with whom the respective buyers traded and prices paid; but the question soon arose whether the institutions in combination would not, by the greater size of the order, secure a reduction of prices on commodities commonly used, or, in other words, if there was not an advantage in quantity buying.

Among the things thus considered was coal. A committee was appointed which made an exhaustive investigation, with the result that much valuable information was obtained. Dealers were invited to submit prices in competition and many of them did so. These prices were submitted to the superintendents of the various institutions for consideration.

Butter, eggs, beans, soap, potatoes, toilet paper, hay and grain, and farm hardware were among other things so considered, and in several instances combination purchases have been made. In other cases where prices have been submitted it has been discovered that there was no advantage in combination buying, and the institutions have acted individually upon the information obtained.

Papers have been read upon the distribution of supplies, kitchen and dining room management, beds and bedding, etc.

The beginning of this year, as of previous years, was devoted by this department to the analysis, verification and tabulation of the financial returns received from the institutions at the close of the preceding year.

Vide, table of Financial Summary, page 201, and those following.

All money received by this Board, whether from the Commonwealth, under legislative appropriation or from individuals, for the support of patients, and all money disbursed by this Board, is handled by the financial department, and the accounts pertaining thereto are kept in its office in the State House.

The summary of the transactions involved appears in the table "Finances of the Board," which follows.

FINANCIAL SUMMARY.

The financial summary combines the totals of all the tables which follow. It starts with the State's property at the beginning of the year, *vide*, Sheet No. 1, column "Total Inventory, \$13,690,760.94," adds the "Unexpended Balance of Special Appropriations," "Accounts Receivable" and "Private Funds," making the aggregate resources with which the institutions started the year. \$14,598,774.19. It then shows the increment to this amount through "Additions to Quantity, \$485,516.14," resulting from expenditures under "Special" and "Maintenance" appropriations and the automatic "Appreciation in Value, \$99,660.07," due to rise in markets or improved conditions of property.

Next, the moneys appropriated for "Maintenance" and "Special" purposes, the former being \$2,795,870.89, the latter \$762,940, and finally, "Receipts from All Sources," or the income of the institutions, \$399,432.03. The aggregate, \$19,142,193.32, is the sum of the resources with which the institutions started the year, combined with the increment or increase from all sources during its progress.

Sheet No. 2 shows subtractions from the aggregate just referred to for "Decrease in Quantity, \$43,016.93," again due

to the operation of "Maintenance" and "Special" appropriations, "Depreciation in Value, \$219,420.55," expenditure under "Maintenance Appropriation, \$2,773,614.24," "Special Appropriation, \$409,209.09," and "Reversions of Unexpended Balances of Special Appropriation," which revert because of the expiration of the time over which they extended, or from the completion of the specific object for which they were granted, in amount \$705.97, and "Remittances to the Treasurer of the Commonwealth, \$399,432.03," which is the amount received by the institutions from all other sources than through legislative appropriation.

The table then shows, under "Resources Nov. 30, 1910," the property of the State after it has been subjected to the counteracting influences of increase and decrease, appropriation and expenditure, money received from income and money remitted to the Treasurer of the Commonwealth. Said figures are as follows:—

Inventory,	\$13,965,816 52
Unexpended balance of special appropriations,	1,179,505 75
Unexpended balance of maintenance appropriations,	22,256 65
Accounts receivable,	61,664 92
Private funds,	67,550 67
<hr/>	
Total resources,	\$15,296,794 51

For the detail of inventory "Increase and Decrease in Quantity," "Appreciation and Depreciation in Value," see Table No. 5; of receipts. Table No. 6; expenditures under "Maintenance Appropriation," Table No. 7; expenditures under "Special Appropriation," Table No. 10.

The following is a condensation of the above:—

Sheet 1.—Resources at Beginning of the Year and Additions thereto.

Inventory Nov. 30, 1909, .	\$13,690,760 94
Unexpended balance of	
special appropriation, .	826,480 81
Accounts receivable, .	71,978 27
Private funds,	9,554 17
Total resources,	<hr/> \$14,598,774 19

Total addition to quantity, . . .	\$485,516 14
Net appreciation in value, . . .	99,660 07
Maintenance appropriation, . . .	2,795,870 89
Special appropriation, . . .	762,940 00
Receipts from all sources except State treasury,	399,432 03

Aggregates, \$19,142,193 32

Sheet 2.—Resources at End of the Year, Decreases in Quantity, Value of Property and Expenditures.

Decrease in quantity of commodities currently consumed,	\$43,016 93
Net depreciation in value,	219,420 55
Expenditures from maintenance appropriation,	2,773,614 24
Expenditures from special appropriation,	409,209 09
Unexpended balances of special appropriation reverting to State treasury,	705 97
Money remitted to State treasury from receipts,	399,432 03
Inventory Nov. 30, 1910, \$13,965,816 52	
Unexpended balance of special appropriation,	1,179,505 75
Unexpended balance of maintenance appropriation reverting to State treasury,	22,256 65
Accounts receivable,	61,664 92
Private funds,	67,550 67
	<hr/> 15,296,794 51
	<hr/> \$19,142,193 32

TABLE 4. — *Financial Summary for the Year ending Nov. 30, 1910.*

		RESOURCES NOV. 30, 1909.				
		Inventory.	Unexpended Balance of Special Appropriations.	Accounts Receivable.	Private Funds.	Total Resources.
The insane: —						
State hospitals: —						
Worcester,		\$2,107,902 51	\$2,114 90	\$11,045 04	\$8,450 95	\$2,129,513 40
Taunton,		819,789 96	5,125 79	9,993 68	—	834,909 43
Northampton,		858,370 18	1,402 61	12,367 96	652 92	872,993 67
Danvers,		1,905,797 40	—	8,212 87	—	1,914,010 27
Westborough,		985,342 46	35,498 62	2,800 00	—	1,023,641 08
Boston,		1,217,927 50	518,974 08	6,509 64	—	1,743,411 22
Totals,		\$7,895,330 01	\$563,116 00	\$50,929 19	\$9,103 87	\$8,518,479 07
State asylums: —						
Worcester,		\$1,067,514 20	\$55,497 72	\$783 42	—	\$1,123,795 34
Medfield,		1,802,551 26	9,751 86	—	—	1,812,303 12
Gardner State Colony,		566,943 72	12,749 29	—	—	579,693 01
Totals,		\$3,437,009 18	\$77,998 87	\$783 42	—	\$3,515,791 47
Totals, hospitals and asylums,		11,332,339 19	641,114 87	51,712 61	\$9,103 87	12,034,270 54
Miscellaneous: —						
Monson State Hospital,		\$746,589 39	98,491 27	\$724 69	\$450 30	\$846,255 65
Foxborough State Hospital,		403,035 72	13,135 61	5,088 34	—	423,259 67
School for Feeble-minded at Waltham,		979,409 91	4,939 86	14,452 63	—	998,801 20
Wrentham State School,		227,387 43	68,799 70	—	—	296,187 13
Totals,		\$2,358,421 75	\$185,365 94	\$20,265 66	\$450 30	\$2,564,503 65
Totals, hospitals, asylums and miscellaneous,		13,690,760 94	\$26,480 81	71,978 27	9,554 17	14,598,774 19

TABLE 4. — *Financial Summary for the Year ending Nov. 30, 1910* — Continued.

INSTITUTIONS.	NET INCREASE IN RESOURCES DURING YEAR.				APPROPRIATIONS.		Receipts from All Sources, except State Treasurer.	Aggregates.
	NET ADDITIONS TO QUANTITY.			Net Appreciation in Value.	Main-tenance.	Special.		
	Of Com-modities currently consumed.	Of Other Property.	Total Additions.					
The insane:—								
State hospitals:—								
Worcester,	—	\$26,891 12	\$26,891 12	—	\$316,300 00	—	\$73,487 19	\$2,546,191 71
Taunton,	\$3,507 92	19,137 14	22,645 06	\$1,400 44	236,000 00	\$77,500 00	39,180 24	1,211,635 17
Northampton,	—	962 99	962 99	51,100 00	193,000 00	—	51,389 19	1,169,445 85
Danvers,	—	43,061 51	43,061 51	—	296,500 00	11,000 00	64,716 90	2,329,288 68
Westborough,	—	29,573 52	29,573 52	2,219 17	270,000 00	67,000 00	78,259 94	1,470,693 71
Boston,	—	16,538 43	18,607 43	—	213,550 00	358,000 00	27,717 03	2,361,285 68
Totals,	\$5,576 92	\$136,164 71	\$141,741 63	\$4,719 61	\$1,525,350 00	\$513,500 00	\$334,750 49	\$11,088,540 80
State asylums:—								
Worcester,	—	\$95,084 12	\$95,084 12	—	\$251,500 00	\$51,700 00	\$9,207 85	\$1,531,287 31
Medfield,	—	16,542 74	16,542 74	—	316,800 00	41,500 00	9,327 68	2,196,473 54
Gardner State Colony,	—	36,776 93	36,776 93	—	116,500 00	16,000 00	2,612 64	751,582 58
Totals,	—	\$148,403 79	\$148,403 79	—	\$684,800 00	\$109,200 00	\$21,148 17	\$4,479,343 43
Totals, hospitals and asylums,	\$5,576 92	284,568 50	290,145 42	\$4,719 61	2,210,150 00	622,700 00	355,898 66	15,567,884 23
Miscellaneous:—								
Monson State Hospital,	—	\$85,644 01	\$85,644 01	\$4,614 61	\$167,500 00	\$8,740 00	\$14,721 20	\$1,127,475 47
Foxborough State Hospital,	\$2,633 18	5,401 24	8,034 42	1,597 50	95,400 00	50,000 00	8,120 75	586,412 34
School for Feeble-minded at Waltham,	1,232 06	60,687 75	61,919 81	—	273,820 89 ¹	—	20,469 04	1,355,010 94
Wrentham State School,	932 27	38,840 21	39,772 48	38,728 35	49,000 00	81,500 00	222 38	505,410 34
Totals,	\$4,797 51	\$190,573 21	\$195,370 72	\$44,940 46	\$585,720 89 ¹	\$140,240 00	\$43,533 37	\$3,574,309 09
Totals, hospitals, asylums and miscellaneous,	10,374 43	475,141 71	485,516 14	99,660 07	2,795,870 89 ¹	762,940 00	399,432 03	19,142,193 32

¹ Includes \$820.89 for sewage disposal.

TABLE 4. — *Financial Summary for the Year ending Nov. 30, 1910* — Continued.

		RESOURCES, Nov. 30, 1910.					Total Resources.
INSTITUTIONS.		Inventory.	Unexpended Balance of Special Appropria- tion.	Unexpended Balance of Maintenance Appropriation reverting to State Treasury.	Accounts Receivable.	Private Funds.	
The insane: —							
State hospitals: —							
Worcester,		\$2,129,084 75	—	\$17,927 09	\$10,624 05	\$8,591 84	\$2,186,227 73
Taunton,		844,633 58	\$68,214 46	1 38	9,195 56	—	922,044 98
Northampton,		908,906 65	86 84	21,686 86	12,284 69	677 61	943,642 65
Danvers,		1,826,929 71	3,433 80	23,997 98 ¹	8,791 34	—	1,815,156 87
Westborough,		1,011,409 95	46,073 59	4 63	3,600 00	—	1,061,088 17
Boston,		1,238,385 28	842,475 35	5 23	4,659 29	—	2,085,535 15
Totals,		\$7,959,349 92	\$960,284 04	\$15,627 21	\$49,154 93	\$9,269 45	\$8,993,685 55
State asylums: —							
Worcester,		\$1,162,119 75	\$49,684 65	\$179 58	—	—	\$1,211,983 98
Medfield,		1,717,191 99	33,996 73	491 25	—	—	1,751,679 97
Gardner State Colony,		603,700 82	3,068 85	—	—	—	606,769 67
Totals,		\$3,483,012 56	\$86,750 23	\$670 83	—	—	\$3,570,433 62
Totals, hospitals and asylums,		11,442,362 48	1,047,034 27	16,298 04	\$49,154 93	\$9,269 45	12,564,119 17
Miscellaneous: —							
Norton State Hospital,		\$895,393 96	\$14,001 75	—	\$255 78	\$408 97	\$840,090 46
Foxborough State Hospital,		417,336 50	50,581 87	\$27 29	2,419 48	—	470,365 14
School for Feeble-minded at Waltham,		974,835 32	—	2,209 09	9,804 73	57,872 25	1,044,721 39
Wrentham State School,		305,888 26	67,887 86	3,722 23	—	—	377,498 35
Totals,		\$2,523,454 04	\$132,471 48	\$5,958 61	\$12,509 99	\$58,281 22	\$2,732,675 34
Totals, hospitals, asylums and miscellaneous,		13,965,816 52	1,179,505 75	22,256 65	61,664 92	67,550 67	15,296,794 51

¹ Deficiency.

TABLE 4. — *Financial Summary for the Year ending Nov. 30, 1910 — Concluded.*

INSTITUTIONS.	DECREASE IN RESOURCES DURING YEAR.		EXPENDITURES.		Unexpended Balances of Special Appropriations reverting to State Treasury.	Money remitted to State Treasury from Receipts.	Aggregates.
	Decrease in Quantity of Commodities currently consumed.	Net Depreciation in Value.	Maintenance Appropriations.	Special Appropriations.			
The insane: —							
State hospitals: —							
Worcester,	\$5,988 98	—	\$293,372 91	\$2,114 90	—	\$73,487 19	\$2,548,191 71
Taunton,	—	—	235,998 62	14,411 33	—	39,180 24	1,211,635 17
Northampton,	1,785 10	—	171,313 14	787 93	\$527 84	51,389 19	1,169,445 85
Danvers,	9,080 69	\$112,270 04	320,497 98	7,566 20	—	64,716 90	2,329,288 68
Westborough,	4,925 20	—	269,995 37	56,425 03	—	78,259 94	1,470,693 71
Boston,	—	—	213,544 77	34,498 73	—	27,717 03	2,361,285 68
Totals,	\$21,779 97	\$112,270 04	\$1,509,722 79	\$115,804 12	\$527 84	\$334,750 49	\$11,088,540 80
State asylums: —							
Worcester,	\$1,261 99	—	\$251,320 42	\$57,491 55	\$21 52	\$9,207 85	\$1,531,237 31
Medfield,	8,020 85	\$93,881 16	316,308 75	17,218 48	30 65	9,327 68	2,196,473 54
Gardner State Colony,	19 83	—	116,500 00	25,666 02	14 42	2,612 64	751,582 58
Totals,	\$9,302 67	\$93,881 16	\$684,129 17	\$100,376 05	\$72 59	\$21,148 17	\$4,479,343 43
Totals, hospitals and asylums,	31,082 64	206,151 20	2,193,851 96	216,180 17	600 43	355,898 66	15,567,884 23
Miscellaneous: —							
Monson State Hospital,	\$11,934 29	—	\$167,500 00	\$83,158 44	\$71 08	\$14,721 20	\$1,127,475 47
Foxborough State Hospital,	—	—	95,372 71	12,536 47	17 27	8,120 75	586,412 34
School for Feeble-minded at Waltham,	—	\$13,269 35	271,611 80 ¹	4,937 76	1 60	20,469 04	1,355,010 94
Wrentham State School,	—	—	43,277 77	82,396 25	15 59	222 38	505,410 34
Totals,	\$11,934 29	\$13,269 35	\$579,762 281	\$193,028 92	\$105 54	\$43,533 37	\$3,574,309 09
Totals, hospitals, asylums and miscellaneous,	43,016 93	219,420 55	2,773,614 241	409,209 09	705 97	399,432 03	19,142,193 32

¹ Includes \$820.89 for sewage disposal.

INVENTORY.

The total of real and personal property shows an increase from last year of \$275,000, which is distributed as follows: "Increase in Valuation of Real Property, \$662,000," and "Decrease in Value of Personal Property, \$387,000." The cause of this is the adoption of a new classification for machinery, piping, wiring, etc., which has hitherto been inventoried with personal property, and has now been transferred to real estate, under the subclassification of "Betterments and Superstructure."

The purpose of this change is to separate from each a class of property which has hitherto by a few institutions been called real and by others personal. Having established a definite unit for this class, it is possible to trace the opposite effects of depreciation and expenditure upon it.

The distribution of decrease in personal property is as follows:—

Provisions and groceries (decrease),	\$1,939 72
Clothing and clothing material (increase),	43,327 71
Furnishings (decrease),	34,522 70
Heat, light and power (decrease),	14,771 80
Repairs and improvements (decrease),	387,512 87
Farm, stable and grounds (increase),	13,168 55
Miscellaneous (decrease),	4,380 51

The increase on "Clothing and Clothing Material" may be attributed to the fact that clothing in use on the wards has been listed this year in the inventory and given credit as an asset, whereas in previous years it has in most instances been neglected.

The decrease in "Furnishings" may be attributed in a slight degree to a reclassification or more accurate definition of the word under the new inventory, and the consequent removal from this class of merchandise of many articles heretofore included; also, and in a greater degree, to the fact that depreciation has this year been applied, and in most institutions has previously been neglected.

The very large decrease under "Repairs and Improvements" is due to the removal from this head of machinery, plumbing, steam fitting, wiring, etc., which, as has above been stated, is now inventoried under real estate under the subheading of "Betterments and Superstructure." "Repairs and Improvements" at the present time means such detached parts of engines as are on hand in the engineer's department, to be applied to the repair of the same, and such mechanical supplies as paint, lumber, nails, tools, etc., as are used for repairs or renewals throughout the institution.

It may be regarded as one of the most beneficial effects of the new form of inventory that it has caused an accurate definition of this classification.

"Repairs and Improvements" have hitherto been understood to mean many different things by the various institutions, and attempts at a periodical comparison of the stock on hand with the previously existing one, or an effort to trace the effect of expenditures as opposed to depreciation, has been a futile waste of time.

TABLE 5. — *Inventory of the State Institutions, Nov. 30, 1910.*

INSTITUTIONS.	REAL ESTATE.						
	LAND.						
	WOODLAND.		MOWING.		TILLAGE.		
	Acres.	Value.	Acres.	Value.	Acres.	Value.	
The insane:—							
State hospitals:—							
Worcester,	137	\$247,440 00	134	\$5,960 00	—	—	
Taunton,	20	5,000 00	50	10,000 00	145	\$21,750 00	
Northampton,	23	4,801 20	93	19,655 55	110	23,248 50	
Danvers,	26	30,000 00	40	1,400 00	176	26,000 00	
Westborough,	68	13,600 00	152	8,650 00	36	540 00	
Boston,	12	109,519 00	5	2,200 00	115	211,700 00	
Totals,	286	\$410,420 20	474	\$47,465 55	582	\$283,238 50	
State asylums:—							
Worcester,	11	\$193,800 00	358	\$8,950 00	191	\$7,641 60	
Medfield,	75	40,000 00	233	2,876 39	60	1,458 00	
Gardner State Colony,	27	932 58	768	16,272 73	35	621 25	
Totals,	113	\$234,732 58	1,299	\$28,099 12	286	\$9,720 85	
Totals, hospitals and asylums,	399	645,152 78	1,773	75,564 67	868	292,959 35	
Miscellaneous:—							
Monson Hospital,	50	\$4,875 00	338	\$6,988 00	90	\$8,655 00	
Foxborough Hospital,	21	6,220 00	20	4,100 00	3	700 00	
School for Feeble-minded at Waltham,	54	16,953 00	1,366	27,603 00	306	25,800 00	
Wrentham School,	15	3,000 00	230	15,800 00	36	3,500 00	
Totals,	140	\$31,048 00	1,954	\$52,391 00	434	\$38,661 00	
Totals, hospitals, asylums and miscellaneous,	539	670,200 78	3,727	127,955 67	1,302	331,620 35	
Mental wards, State Infirmary,	—	—	—	—	—	—	
Bridgewater Hospital,	—	—	—	—	—	—	
Totals,	—	—	—	—	—	—	
Aggregates,	—	—	—	—	—	—	

TABLE 5. — *Inventory of the State Institutions, Nov. 30, 1910* — Continued.

INSTITUTIONS.	REAL ESTATE — Con.					
	LAND — Con.					
	PASTURE.		MISCELLANEOUS.		TOTAL.	
	Acres.	Value.	Acres.	Value.	Acres.	Value.
The insane: —						
State hospitals: —						
Worcester,	64	\$2,580 00	—	—	510	\$413,480 00
Taunton,	63	7,875 00	—	—	333	52,875 00
Northampton,	185	39,099 75	—	—	511	108,000 00
Danvers,	190	4,800 00	—	—	509	73,600 00
Westborough,	178	5,340 00	27	\$470 00	708	51,450 00
Boston,	17	5,320 00	35	11,390 00	234	429,129 00
Totals,	697	\$65,014 75	62	\$11,860 00	2,305	\$1,128,534 00
State asylums: —						
Worcester,	224	\$4,938 34	—	—	904	\$220,129 94
Medfield,	16	400 00	—	—	441	46,119 39
Gardner State Colony,	536	6,260 44	200	\$1,148 00	1,604	26,950 00
Totals,	776	\$11,598 78	200	\$1,148 00	2,949	\$293,199 33
Totals, hospitals and asylums,	1,473	76,613 53	262	13,008 00	5,754	1,421,733 33
Miscellaneous: —						
Monson Hospital,	133	\$4,809 00	10	\$450 00	687	\$32,377 00
Foxborough Hospital,	20	3,260 00	—	—	102	22,080 00
School for Feeble-minded at Waltham,	184	2,510 00	—	—	1,910	72,772 00
Wrentham School,	200	10,000 00	—	—	503	31,800 00
Totals,	537	\$20,579 00	10	\$450 00	3,202	\$158,979 00
Totals, hospitals, asylums and miscellaneous,	2,010	97,192 53	272	13,458 00	8,956	1,580,712 33
Mental wards, State Infirmary,	—	—	—	—	—	\$20,400 42
Bridgewater Hospital,	—	—	—	—	—	19,362 99
Totals,	—	—	—	—	—	\$39,763 41
Aggregates,	—	—	—	—	—	1,620,475 74

TABLE 5. — *Inventory of the State Institutions, Nov. 30, 1910 — Continued.*

INSTITUTIONS.	REAL ESTATE — Con.				
	BUILDINGS.				
	Patients.	Nurses.	Farm, Stable and Grounds.	Miscellaneous.	Total.
The insane: —					
State hospitals: —					
Worcester,	\$1,086,043 64	\$84,548 00	\$69,347 28	\$500 00	\$1,240,438 92
Taunton,	315,520 00	69,040 00	45,990 00	79,040 00	509,590 00
Northampton,	462,564 00	—	29,850 00	31,189 00	523,603 00
Danvers,	1,426,850 00	13,500 00	29,250 00	66,575 00	1,536,175 00
Westborough,	464,400 00	43,175 00	18,185 00	46,716 00	572,476 00
Boston,	463,267 00	15,206 00	12,646 00	7,624 00	498,743 00
Totals,	\$4,218,644 64	\$225,469 00	\$205,268 28	\$231,644 00	\$4,881,025 92
State asylums: —					
Worcester,	\$566,200 66	\$9,950 00	\$12,220 00	\$51,725 00	\$640,095 66
Medfield,	653,303 97	106,978 00	63,087 00	520,216 63	1,343,585 60
Gardner State Colony,	213,701 24	8,468 10	33,726 44	56,968 27	312,864 05
Totals,	\$1,433,205 87	\$125,396 10	\$109,033 44	\$628,909 90	\$2,296,545 31
Totals, hospitals and asylums,	5,651,850 51	350,865 10	314,301 72	\$60,553 90	7,177,571 23
Miscellaneous: —					
Monson Hospital,	\$313,512 22	\$15,934 00	\$36,400 54	\$69,807 65	\$435,654 41
Foxborough Hospital,	112,500 00	20,250 00	7,649 00	78,666 00	219,065 00
School for Feeble-minded at Waltham,	390,033 18	51,000 00	19,857 00	105,589 85	566,480 03
Wrentham School,	55,646 44	10,495 53	18,573 59	45,915 00	130,630 56
Totals,	\$871,691 84	\$97,679 53	\$82,480 13	\$299,978 50	\$1,351,830 00
Totals, hospitals, asylums and miscellaneous,	6,523,542 35	448,544 63	396,781 85	1,160,532 40	8,520,401 23
Mental wards, State Infirmary,	—	—	—	—	\$302,764 32
Bridgewater Hospital,	—	—	—	—	275,301 49
Totals,	—	—	—	—	\$638,065 81
Aggregates,	—	—	—	—	9,167,467 04

TABLE 5. — *Inventory of the State Institutions, Nov. 30, 1910* — Continued.

INSTITUTIONS.	REAL ESTATE — CON.					Aggregates.
	BETTERMENTS.					
	Water System and Ap- purtenances.	Drainage System and Ap- purtenances.	Heating, Lighting System and Appurtenances.	Miscellaneous.	Total.	
The insane: —						
State hospitals: —						
Worcester,	\$99,862 86	—	\$126,423 32	\$28,469 31	\$254,755 49	\$1,908,674 41
Taunton,	7,510 75	\$9,082 51	47,548 00	102,410 00	166,551 26	729,016 26
Northampton,	—	—	21,138 37	163,705 00	184,843 37	\$16,446 37
Danvers,	14,700 00	—	81,390 85	3,989 43	100,080 28	1,709,855 28
Westborough,	60,000 00	30,000 00	—	178,900 00	268,900 00	\$92,826 00
Boston,	—	—	50,625 00	160,132 00	210,757 00	1,138,629 00
Totals,	\$182,073 61	\$39,082 51	\$327,125 54	\$637,605 74	\$1,185,887 40	\$7,195,447 32
State asylums: —						
Worcester,	\$24,000 00	\$27,500 00	\$4,400 00	\$117,129 80	\$173,029 80	\$1,033,255 40
Medfield,	—	—	—	158,262 00	158,262 00	1,547,966 99
Gardner State Colony,	35,310 51	20,539 54	27,970 50	84,342 05	168,162 60	507,976 65
Totals,	\$59,310 51	\$48,039 54	\$32,370 50	\$359,733 85	\$499,454 40	\$3,089,199 04
Totals, hospitals and asylums,	241,384 12	87,122 05	359,496 04	997,339 59	1,685,341 80	10,284,646 36
Miscellaneous: —						
Monson Hospital,	\$25,500 00	\$20,958 23	\$44,225 70	\$133,084 28	\$223,768 21	\$691,799 62
Foxborough Hospital,	9,346 00	7,326 00	7,215 00	91,007 00	114,894 00	355,989 00
School for Feeble-minded at Waltham,	—	—	22,098 42	182,207 54	204,305 96	843,557 99
Wrentham School,	20,000 00	1,200 00	21,816 74	68,869 00	111,885 74	274,316 30
Totals,	\$54,846 00	\$29,484 23	\$95,355 86	\$475,167 82	\$654,853 91	\$2,165,662 91
Totals, hospitals, asylums and miscellaneous,	296,230 12	116,606 28	454,851 90	1,472,507 41	2,340,195 71	12,450,309 27
Mental wards, State Infirmary,	—	—	—	—	—	\$383,164 74
Bridgewater Hospital,	—	—	—	—	—	294,664 48
Totals,	—	—	—	—	—	\$677,829 22
Aggregates,	—	—	—	—	\$2,340,195 71	13,128,138 49

TABLE 5. — *Inventory of the State Institutions, Nov. 30, 1910* — Continued.

	PERSONAL PROPERTY.							
	PROVISIONS AND GROCERIES.		CLOTHING AND CLOTHING MATERIAL.		FURNISHINGS.			
	Amount.	Increase.	Amount.	Increase.	Amount.	Increase.	Amount.	Increase.
The insane: —								
State hospitals: —								
Worcester,	\$13,115 48	\$1,620 77 ¹	\$18,480 29	\$14,517 53	\$114,050 61	\$16,166 26		
Taunton,	2,902 91	763 43 ¹	7,270 12	4,220 37	71,009 02	1,550 65		
Northampton,	9,290 94	1,395 80 ¹	3,437 26	136 29	36,582 58	995 98 ¹		
Danvers,	7,135 16	4,407 83	7,679 69	1,634 88	46,331 94	35,255 57 ¹		
Westborough,	4,776 35	3,566 26 ¹	3,133 29	903 89	66,875 70	6,583 20		
Boston,	4,391 72	880 52	10,711 83	3,326 11	47,514 05	5,373 53		
Totals,	\$41,612 56	\$6,057 91 ¹	\$50,712 48	\$24,739 07	\$382,963 90	\$6,580 91 ¹		
State asylums: —								
Worcester,	\$7,022 47	\$1,683 71 ¹	\$13,781 95	\$7,487 69	\$51,941 33	\$1,851 15		
Medfield,	6,907 81	3,491 07	17,839 74	8,409 35	31,400 03	38,593 97 ¹		
Gardner State Colony,	2,874 68	657 45	14,212 05	3,251 54	33,435 73	1,787 57		
Totals,	\$16,804 96	\$2,464 81	\$45,833 74	\$19,148 58	\$136,783 09	\$34,955 25 ¹		
Totals, hospitals and asylums,	58,477 52	3,593 10 ¹	96,566 22	43,887 65	519,746 99	41,536 16 ¹		
Miscellaneous: —								
Monson Hospital,	\$2,522 05	\$1,372 12 ¹	\$4,441 43	\$418 53 ¹	\$77,855 50	\$11,277 04		
Foxborough Hospital,	3,357 94	1,589 81	1,840 08	495 33 ¹	25,362 01	1,590 31 ¹		
School for Feeble-minded at Waltham,	3,344 24	1,321 40	4,583 33	803 71 ¹	62,988 91	12,895 34 ¹		
Wrentham School,	412 89	114 29	1,562 68	1,157 63	14,795 45	10,222 07		
Totals,	\$9,637 12	\$1,653 38	\$12,427 52	\$559 94 ¹	\$181,001 87	\$7,013 46		
Totals, hospitals, asylums and miscellaneous,	68,114 64	1,939 72 ¹	108,993 74	43,327 71	700,748 86	34,522 70 ¹		
Mental wards, State Infirmary,	\$2,182 68	\$93 47 ¹	\$5,700 40	\$1,314 35	\$52,896 37	\$2,822 68		
Bridgewater Hospital,	3,409 28	289 28	16,032 42	3,173 91	30,019 80	1,915 80		
Totals,	\$5,541 96	\$195 81	\$21,732 82	\$4,488 26	\$82,916 17	\$4,738 48		
Aggregates,	73,656 60	1,743 91 ¹	130,726 56	47,815 97	783,665 03	29,784 22 ¹		

¹ Decrease.

TABLE 5. — *Inventory of the State Institutions, Nov. 30, 1910* — Continued.

INSTITUTIONS.	PERSONAL PROPERTY — CON.			
	HEAT, LIGHT AND POWER.			
	FUEL.		MISCELLANEOUS.	
	Amount.	Increase.	Amount.	TOTALS.
The insane: —				
State hospitals: —				
Worcester,	\$2,042 00	\$2,689 24 ¹	\$674 94	\$2,716 94
Taunton,	7,206 00	1,386 00	—	7,206 00
Northampton,	4,313 36	1,023 43	—	4,313 36
Danvers,	863 50	11,697 90 ¹	566 86	1,430 36
Westborough,	623 25	556 55 ¹	—	1,623 25
Boston,	1,680 48	958 48	—	1,680 48
Totals,	\$16,728 59	\$11,575 78 ¹	\$1,241 80	\$17,970 39
State asylums: —				
Worcester,	\$6,648 05	\$430 35	\$200 00	\$6,878 05
Medfield,	10,456 58	5,950 92 ¹	8 43	10,465 01
Gardner State Colony,	2,402 93	2,540 65 ¹	439 18	2,842 11
Totals,	\$19,507 56	\$8,081 22 ¹	\$656 61	\$20,164 17
Totals, hospitals and asylums,	36,236 15	19,637 00 ¹	1,898 41	38,134 56
Miscellaneous: —				
Monson Hospital,	\$145 30	\$1,894 86 ¹	\$1,278 41	\$1,423 71
Foxborough Hospital,	4,038 75	1,211 95	1,668 70	5,757 45
School for Feeble-minded at Waltham,	11,767 00	2,684 50	676 74	12,443 74
Wrentham School,	3,723 77	192 77	210 00	3,833 77
Totals,	\$19,724 82	\$2,104 36	\$3,833 85	\$23,558 67
Totals, hospitals, asylums and miscellaneous,	55,960 97	17,442 64 ¹	5,732 26	61,693 28
Mental wards, State Infirmary,	\$3,577 94	\$809 44	—	\$3,577 94
Bridgewater Hospital,	2,691 19	1,941 35 ¹	—	2,691 19
Totals,	\$6,269 13	\$1,131 91 ¹	—	\$6,269 13
Aggregates,	62,230 10	18,574 55 ¹	\$5,732 26	67,962 36
Totals,	\$11,131 91 ¹	\$1,131 91 ¹	—	\$1,131 91 ¹
Aggregates,	15,903 71 ¹	15,903 71 ¹	—	15,903 71 ¹

¹ Decrease.

TABLE 5. — *Inventory of the State Institutions, Nov. 30, 1910* — Continued.

INSTITUTIONS.	PERSONAL PROPERTY — CON.									
	REPAIRS AND IMPROVEMENTS.				FARM, STABLE AND GROUNDS.					
	MACHINERY AND MECHANICAL FIXTURES.		MISCELLANEOUS.		TOTALS.		LIVE STOCK.		PRODUCE.	
	Amount.	Increase.	Amount.	Increase.	Amount.	Increase.	Amount.	Increase.	Amount.	Increase.
The insane: —										
State hospitals: —										
Worcester,	\$3,074 62	\$45,140 47 ¹	\$4,580 04	\$7,654 66	\$42,084 43 ¹	\$4,150 00	\$26,600 00	\$4,150 00	\$3,486 50	\$1,678 97 ¹
Taunton,	1,026 26	46,558 74 ¹	—	1,026 26	46,558 74 ¹	32 75	10,885 25	32 75	3,875 50	1,152 25
Northampton,	—	21,750 00 ¹	—	—	21,750 00 ¹	574 00	15,349 00	574 00	14,198 97	1,490 84 ¹
Danvers,	—	82,107 81 ¹	16,068 07	16,068 07	66,039 74 ¹	13,977 20	13,977 20	4,186 80 ¹	11,402 00	574 80
Westborough,	970 00	50,913 49 ¹	3,437 50	4,407 50	49,988 49 ¹	1,260 00	18,439 00	1,260 00	9,297 43	1,706 28 ¹
Boston,	5,874 00	5,874 00	4,773 34	10,647 34	7,244 58	1,658 60	8,078 60	1,658 60	7,865 05	1,230 00
Totals,	\$10,944 88	\$240,598 51 ¹	\$28,858 95	\$39,803 83	\$219,176 82 ¹	\$3,488 65	\$93,129 05	\$3,488 65	\$50,125 45	\$2,918 84 ¹
State asylums: —										
Worcester,	—	\$46,051 82 ¹	\$11,245 03	\$11,245 03	\$34,806 79 ¹	\$3,550 50	\$17,880 50	\$3,550 50	\$5,228 33	\$1,627 44
Medfield,	\$30,036 81	81,963 19 ¹	6,650 24	36,687 05	75,605 66 ¹	8,195 77	33,801 65	8,195 77	2,142 50	5,561 00 ¹
Gardner State Colony,	2,825 69	260 47 ¹	6,317 00	9,142 69	2,539 02	1,435 25	10,269 50	1,435 25	9,357 45	1,081 28 ¹
Totals,	\$32,862 50	\$128,275 48 ¹	\$24,212 27	\$57,074 77	\$107,873 43 ¹	\$13,181 52	\$61,951 65	\$13,181 52	\$16,728 28	\$5,014 84 ¹
Totals, hospitals and asylums,	43,807 38	368,871 99 ¹	53,071 22	96,878 60	327,050 25 ¹	16,670 17	155,080 70	16,670 17	66,853 73	7,933 68 ¹
Miscellaneous: —										
Monson Hospital,	\$6,947 09	\$41,074 25 ¹	\$3,476 21	\$10,423 30	\$40,059 29 ¹	\$3,333 50	\$15,230 00	\$3,333 50	\$1,277 50	\$8,248 78 ¹
Foxborough Hospital,	5,342 62	1,168 23 ¹	7,702 04	13,044 66	1,561 23	1,924 25	6,467 50	1,924 25	492 15	1,244 03 ¹
School for Feeble-minded at Waltham,	—	26,686 25 ¹	4,914 55	4,914 55	22,171 40 ¹	1,637 00	12,564 50	1,637 00	11,670 77	1,970 13 ¹
Wrentham School,	—	900 00 ¹	1,136 84	1,136 84	206 84	1,283 00	3,886 00	1,283 00	1,746 70	199 55 ¹
Totals, hospitals, asylums and miscellaneous,	\$12,289 71	\$69,828 73 ¹	\$17,229 64	\$29,519 35	\$60,462 62 ¹	\$8,177 75	\$38,148 00	\$8,177 75	\$15,187 12	\$11,662 49 ¹
Totals, hospitals, asylums and miscellaneous,	56,097 09	438,700 72 ¹	70,300 86	126,397 95	387,512 87 ¹	24,847 92	193,228 70	24,847 92	82,040 85	19,596 17 ¹
Mental wards, State Infirmary,	\$55,452 21	\$9,532 58	—	\$55,482 21	\$9,535 58	\$1,181 62	\$6,347 36	\$1,181 62	\$2,915 38	\$86 55 ¹
Bridgewater Hospital,	39,898 58	3,809 21	—	39,898 58	3,809 21	526 04	9,023 79	526 04	12,885 53	2,828 43
Totals,	\$95,380 79	\$13,344 79	—	\$95,380 79	\$13,344 79	\$1,707 66	\$15,371 15	\$1,707 66	\$15,500 91	\$2,761 88
Aggregates,	151,477 88	425,355 93 ¹	\$70,300 86	221,778 74	374,168 08 ¹	26,555 58	208,599 85	26,555 58	97,541 76	16,834 29 ¹

1 Decrease.

TABLE 5. — *Inventory of the State Institutions, Nov. 30, 1910* — Continued.

PERSONAL PROPERTY — CON.									
FARM, STABLE AND GROUNDS — Con.									
INSTITUTIONS.									
CARRIAGES AND AGRICULTURAL IMPLEMENTS.				MISCELLANEOUS.		TOTAL.			
Amount.		Increase.		Amount.		Amount.		Increase.	
The insane: —									
State hospitals: —									
Worcester,	\$11,530 85	\$3,660 85		\$6,827 10		\$48,444 45		\$8,098 46	
Taunton,	5,038 50	1,111 50 ¹		738 60		20,337 85		1,102 90 ¹	
Northampton,	5,547 21	291 21		—		35,095 18		625 13 ¹	
Danvers,	3,104 66	3,410 80 ¹		4,907 90		33,391 76		6,326 47 ¹	
Westborough,	6,349 45	213 60		2,065 90		36,151 78		273 41 ¹	
Boston,	4,586 15	956 54 ¹		1,868 74		22,398 54		2,826 80	
Totals,	\$36,156 82	\$1,313 18 ¹		\$16,408 24		\$195,819 56		\$2,597 35	
State asylums: —									
Worcester,	\$11,535 76	\$6,483 27		—		\$34,644 59		\$11,061 21	
Medfield,	4,671 75	38 25 ¹		\$930 26		41,546 16		3,526 78	
Gardner Colony,	4,552 06	1,779 90 ¹		4,022 38		28,201 39		360 21	
Totals,	\$20,759 57	\$4,665 12		\$4,952 64		\$104,392 14		\$15,548 20	
Totals, hospitals and asylums,	56,916 39	3,351 94		21,360 88		300,211 70		18,145 55	
Miscellaneous: —									
Monson Hospital,	\$8,366 73	\$1,001 03		\$1,959 32		\$26,833 55		\$4,509 58 ¹	
Foxborough Hospital,	1,985 00	569 43 ¹		376 71		9,321 36		1,327 39 ¹	
School for Feeble-minded at Waltham,	9,947 15	549 50 ¹		899 22		35,081 64		363 29 ¹	
Wrentham School,	1,703 95	30 90		214 78		7,551 43		1,223 26	
Totals,	\$22,002 83	\$87 00 ¹		\$3,450 03		\$78,787 98		\$4,977 00 ¹	
Totals, hospitals, asylums and miscellaneous,	78,919 22	3,264 94		24,810 91		378,999 68		13,168 55	
Mental wards, State Infirmary,									
Bridgewater Hospital,	\$4,001 71	\$277 26		—		\$13,264 45		\$1,392 33	
Totals,	6,982 13	1,055 48		—		23,591 45		4,409 95	
Totals,	\$10,983 84	\$1,332 74		—		\$41,855 90		\$5,802 28	
Aggregates,	89,903 06	4,597 68		\$24,810 91		420,855 58		18,970 83	

1 Decrease.

TABLE 5. — *Inventory of the State Institutions, Nov. 30, 1910* — Continued.

INSTITUTIONS.	REAL AND PERSONAL PROPERTY.				TOTAL VALUATION OF REAL PROPERTY.	
	MISCELLANEOUS.		TOTAL VALUATION OF PERSONAL PROPERTY.		Amount.	Increase.
	Amount.		Amount.	Increase.		
The insane: —						
State hospitals: —						
Worcester,	\$15,947 91	\$220,410 34	\$5,787 07 ¹	\$1,908,674 41	\$26,969 31	
Taunton,	5,265 16	115,617 32	41,697 64 ¹	729,016 26	66,541 26	
Northampton,	3,740 96	92,460 28	21,901 90 ¹	\$16,446 37	72,238 37	
Danvers,	5,037 45	117,074 43	125,572 97 ¹	1,709,855 28	46,705 28	
Westborough,	2,616 08	118,583 95	49,058 51 ¹	892,826 00	75,126 00	
Boston,	2,412 32	99,756 28	20,457 78	1,138,629 00	—	
Totals,	\$35,019 88	\$763,902 60	\$223,560 31 ¹	\$7,195,447 32	\$287,580 22	
State asylums: —						
Worcester,	\$3,371 93	\$128,864 35	\$18,250 67 ¹	\$1,023,255 40	\$112,856 22	
Medfield,	4,203 20	169,225 00	103,877 75 ¹	1,547,966 99	18,518 48	
Gardner Colony,	5,015 52	95,724 17	6,544 87	507,976 65	30,212 23	
Totals,	\$12,680 65	\$393,813 52	\$115,583 55 ¹	\$3,089,199 04	\$161,586 93	
Totals, hospitals and asylums,	47,700 53	1,157,716 12	339,143 86 ¹	10,284,646 36	449,167 15	
Miscellaneous: —						
Monson Hospital,	\$10,094 80	\$133,594 34	\$34,097 54 ¹	\$691,799 62	\$112,902 11	
Foxborough Hospital,	2,664 00	61,347 50	1,913 78	355,989 00	10,387 00	
School for Feeble-minded at Waltham,	7,920 92	131,277 33	30,239 34 ¹	\$43,557 99	25,665 45	
Wrentham School,	2,178 90	31,571 96	14,935 62	274,316 30	63,565 21	
Totals,	\$22,858 62	\$357,701 13	\$47,487 48 ¹	\$2,165,662 91	\$212,519 77	
Totals, hospitals, asylums and miscellaneous,	70,559 15	1,515,507 25	386,631 34 ¹	12,450,309 27	661,686 92	
Mental wards, State Infirmary,	\$2,131 72	\$135,185 77	\$15,936 90	\$383,164 74	\$20,974 42	
Bridgewater Hospital,	464 93	121,107 65	11,532 32	294,664 48	12,316 76	
Totals,	\$2,596 65	\$256,293 42	\$27,469 22	\$677,829 22	\$33,291 18	
Aggregates,	73,155 80	1,771,800 67	359,162 12 ¹	13,128,138 49	694,978 10	

¹ Decrease.

TABLE 5. — *Inventory of the State Institutions, Nov. 30, 1910* — Concluded.

INSTITUTIONS.	REAL AND PERSONAL PROPERTY — CON.					
	TOTAL REAL AND PERSONAL.		PRIVATE FUNDS.		TOTAL INVENTORY.	
	Amount.	Increase.	Amount.	Increase.	Amount.	Increase.
The insane: —						
State hospitals: —						
Worcester,	\$2,129,084 75	\$21,182 24	\$8,591 84	\$140 89	\$2,137,676 59	\$21,323 13
Taunton,	844,633 58	24,843 62	—	—	844,633 58	24,843 62
Northampton,	908,906 65	50,336 47	677 61	24 69	909,584 26	50,361 16
Danvers,	1,826,929 71	78,867 69 ¹	—	—	1,826,929 71	78,867 69 ¹
Westborough,	1,011,400 95	26,067 49	—	—	1,011,400 95	26,067 49
Boston,	1,238,385 28	20,457 78	—	—	1,238,385 28	20,457 78
Totals,	\$7,959,349 92	\$64,019 91	\$9,209 45	\$165 58	\$7,968,619 37	\$64,185 49
State asylums: —						
Worcester,	\$1,162,119 75	\$94,605 55	—	—	\$1,162,119 75	\$94,605 55
Medfield,	1,717,191 99	85,359 27 ¹	—	—	1,717,191 99	85,359 27 ¹
Gardner Colony,	603,700 82	36,757 10	—	—	603,700 82	36,757 10
Totals,	\$3,483,012 56	\$46,003 38	—	—	\$3,483,012 56	\$46,003 38
Totals, hospitals and asylums,	11,442,362 48	110,023 29	\$9,209 45	\$165 58	11,451,631 93	110,138 87
Miscellaneous: —						
Monson Hospital,	\$825,393 96	\$78,804 57	\$408 97	\$41 33 ¹	\$825,802 93	\$78,763 24
Foxborough Hospital,	417,336 50	12,300 78	—	—	417,336 50	12,300 78
School for Feeble-minded at Waltham,	974,835 32	4,573 89 ¹	57,872 25	57,872 25	1,032,707 57	53,298 36
Wrentham School,	305,888 26	78,500 83	—	—	305,888 26	78,500 83
Totals,	\$2,523,454 04	\$165,032 29	\$58,281 22	\$57,830 92	\$2,581,735 26	\$222,803 21
Totals, hospitals, asylums and miscellaneous,	13,965,816 52	275,055 53	67,550 67	57,996 50	14,033,367 19	333,052 08
Mental wards, State Infirmary,	\$518,350 51	\$36,911 32	—	—	518,350 51	\$36,911 32
Bridgewater Hospital,	415,772 13	23,849 08	—	—	415,772 13	23,849 08
Totals,	\$934,122 64	\$60,760 40	—	—	\$934,122 64	\$60,760 40
Aggregates,	14,899,939 16	335,815 93	\$67,550 67	\$57,996 50	14,967,489 83	393,812 48

¹ Decrease.

RECEIPT TABLE.

The total receipts for the year are \$14,000 less than for the previous one. Sales or refunds are \$11,000 more, of which \$8,000 are for farm, stable and grounds; \$4,000 of this is at Worcester Hospital, the rest distributed through the several institutions.

Receipts for extraneous support of patients are \$26,000 less. Monson State Hospital is \$15,000 less; Foxborough State Hospital, \$5,000 less, and Massachusetts School for the Feeble-minded, \$26,000 less. All the other institutions show an evenly distributed increase.

The assumption by the State of the care of sane epileptics, dipsomaniacs and feeble-minded has caused the cessation of payment by cities and towns of moneys hitherto received by the institutions named in reimbursement for the support of these three classes of patients.

TABLE 6. — Receipts of State Institutions during the Fiscal Year ending Nov. 30, 1910 (Available for Maintenance the Following Year, under Section 2, Chapter 175, Acts of 1905).

INSTITUTIONS.	RECEIPTS FOR SUPPORT.				RECEIPTS ON ACCOUNT OF SALES OR REFUNDS.			
	Town.	Reimbursing.	Private.	Total Support.	Salaries, Wages and Labor.	Food.	Clothing and Clothing Material.	Furnishings.
The insane: —								
State hospitals: —								
Worcester,	—	\$20,387 12	\$45,203 51	\$65,590 63	\$43 51	\$1,527 09	\$565 74	\$50 03
Taunton,	\$13 83	13,833 86	23,741 83	37,575 69	15 80	39 31	790 47	2 50
Norhampton,	—	14,799 16	33,664 53	48,463 69	—	249 90	245 83	—
Danvers,	—	22,722 63	38,655 64	61,378 27	33 61	294 78	623 79	6 97
Westborough,	155 06	14,483 44	59,630 06	74,268 56	15 70	338 80	505 26	41 94
Boston,	—	6,574 23	18,896 21	25,470 44	4 93	775 30	65 45	27 36
Totals,	\$168 99	\$92,800 44	\$219,791 78	\$312,761 21	\$113 55	\$3,225 18	\$2,736 54	\$128 80
State asylums: —								
Worcester,	—	\$7,059 12	—	\$7,059 12	\$26 50	\$63 24	\$292 54	—
Medfield,	—	6,370 39	—	6,370 39	18 73	787 42	787 42	\$72 04
Gardner State Colony,	—	1,877 82	—	1,877 82	1 96	27 55	214 17	3 51
Totals, hospitals and asylums,	\$168 99	\$108,707 77	\$219,791 78	\$328,688 54	\$47 19	\$654 72	\$1,294 13	\$75 55
Miscellaneous: —								
Monson Hospital,	\$364 78	\$9,418 98	\$7,717 11	\$11,500 87	\$43 42	\$634 06	\$280 45	\$2 82
Foxborough Hospital,	4,011 50	868 16	1,615 95	6,495 61	9 50	15 89	159 93	12 63
School for Feeble-minded at Waltham,	1,247 51	1,021 93	15,483 06	17,752 50	39 80	52 41	396 99	105 72
Wrentham School,	—	—	60 65	60 65	6 63	1 40	31 98	—
Totals,	\$5,623 79	\$5,309 07	\$24,876 77	\$35,809 63	\$99 35	\$753 76	\$869 35	\$121 17
Totals, hospitals, asylums and miscellaneous,	5,792 78	114,016 84	244,668 55	364,478 17	260 09	4,633 66	4,960 02	325 52
Mental wards, State Infirmary,	—	—	—	\$777 53	\$56 12	\$10 96	—	—
Bridgewater Hospital,	—	—	—	329 57	658 68	—	—	—
Totals,	—	—	—	\$1,107 10	\$714 80	\$10 96	—	—
Aggregates,	\$5,792 78 ¹	\$114,016 84 ¹	\$244,668 55 ¹	\$365,585 27	974 89	4,644 62	\$4,960 02	\$325 52

¹ Exclusive of mental wards, State Infirmary, and Bridgewater.

TABLE 6. — *Receipts of State Institutions during the Fiscal Year ending Nov. 30, 1910, etc. — Concluded.*

INSTITUTIONS.	RECEIPTS ON ACCOUNT OF SALES OR REFUNDS — COL.					Total Receipts.
	Heat, Light and Power.	Repairs and Improvements.	Farm, Stable and Grounds.	Sundries.	Total Sales or Refunds.	
The insane: —						
State hospitals: —						
Worcester,	—	\$124 32	\$4,253 86	\$358 12	\$6,922 67	\$973 89
Taunton,	—	26 10	102 78	10 24	987 20	603 42
Northampton,	—	—	1,787 05	445 97	2,728 75	196 75
Danvers,	\$128 59	201 54	1,365 63	324 68	2,979 59	359 04
Westborough,	20 80	42 20	342 49	764 55	2,071 74	698 80
Boston,	1 05	88 71	892 76	3 19	1,858 75	387 84
Totals,	\$150 44	\$482 87	\$8,744 57	\$1,906 75	\$17,548 70	\$3,219 74
State asylums: —						
Worcester,	—	\$42 48	\$825 33	\$160 05	\$1,410 74	\$137 99
Medfield,	\$150 53	102 43	886 88	87 55	2,669 49	287 80
Gardner State Colony,	21 48	7 10	103 89	51 39	431 05	303 77
Totals,	\$172 01	\$152 01	\$1,816 08	\$299 59	\$4,511 28	\$729 56
Totals, hospitals and asylums,	322 45	634 88	10,560 65	2,206 34	22,059 98	3,949 30
Miscellaneous: —						
Monson Hospital,	—	\$150 01	\$1,854 79	\$58 58	\$3,074 13	\$146 20
Foxborough Hospital,	\$2 50	96 28	249 72	192 51	738 96	886 18
School for Feeble-minded at Waltham,	26 29	20 00	1,681 49	122 80	2,445 60	270 84
Wrentham School,	—	—	28 50	25 55	94 56	67 37
Totals,	\$28 79	\$266 29	\$3,814 50	\$399 84	\$6,353 05	\$1,370 69
Totals, hospitals, asylums and miscellaneous,	351 24	901 17	14,375 15	2,606 18	28,413 03	5,319 99
Mental wards, State Infirmary,	—	—	\$58 60	\$274 99	\$400 67	\$85 22
Bridgewater Hospital,	\$34 90	—	417 96	152 19	1,263 73	116 30
Totals,	\$34 90	—	\$476 56	\$427 18	\$1,664 40	\$201 52
Aggregates,	386 14	\$901 17	14,851 71	3,033 36	30,077 43	5,521 51

1 Includes \$1,220.84 collected by Attorney-General.

MAINTENANCE TABLE.

By referring to the accompanying table, No. 7 (expenses for maintenance and net weekly per capitas for the year ending Nov. 30, 1910), it will be seen that the maintenance of thirteen institutions has cost \$2,738,660.38, as against a similar expenditure in the preceding year of \$2,619,441.12, or an increase of \$119,219.26.

The number of patients supported in these institutions has increased from 11,822 last year to 12,419, or an addition of 597.

The average net weekly per capita cost of maintenance, excluding depreciation and interest charges last year was \$4.26, and in the year ending Nov. 30, 1910, \$4.24, or a diminution of 2 cents.

An analysis of the increases and decreases on the separate items of maintenance follows:—

PER CAPITA COST OF —	Year ending Nov. 30, 1909.	Year ending Nov. 30, 1910.	Increase.	Decrease.
Salaries, wages and labor,	\$1 689	\$1 735	\$0 05	—
Food,	1 059	1 023	—	\$0 04
Clothing and clothing material,	164	165	—	—
Furnishings,	175	185	01	—
Heat, light and power,	352	327	—	02
Repairs and improvements,	248	245	—	—
Farm, stable and grounds,	308	289	—	02
Miscellaneous,	264	272	01	—
Totals,	\$4 259	\$4 241	—	—

It will be seen from the foregoing table that the only two variations worthy of comment are that of the 5-cent increase in salaries, wages and labor, the distribution of which appears in the following compilation:—

	Year ending Nov. 30, 1909.	Year ending Nov. 30, 1910.	Increase.
Medical service,	\$0 17	\$0 18	\$0 01
Ward service,	65	66	01+
General administration,	51	51	-
Repairs and improvements,	16	18	02+
Farm, stable and grounds,	20	20	-
Total,	\$1 69	\$1 73	-

and the 4-cent diminution in the food per capita.

Food.

Statement of the Average Prices paid this Year by All the Institutions, compared with Those of the Preceding Year.

	Year ending Nov. 30, 1909.	Year ending Nov. 30, 1910.	Increase.	Decrease.
Butter,	\$0 26	\$0 29	\$0 03	-
Eggs,	23	24	01	-
Flour,	5 50	5 36	-	\$0 14
Sides of beef,	086	095	01	-
All varieties of meat bought,	087	096	01	-
Sugar,	4 63	5 03	40	-
Potatoes,	84	55	-	29

It should be observed that on but two, flour and potatoes, has there been a decrease.

The following are the average weekly quotations of the Boston Chamber of Commerce, and should be compared with the preceding figures in order to form a judgment as to how the institutions have bought:—

Butter,	\$0 280
Eggs,	250
Sides of beef,	107
Sugar,	5 180
Potatoes,	490

The food consumption has varied but very little from that of the previous year, as may be ascertained by the following table:—

Average Daily Food Consumption by All Institutions.

FOOD COMMODITIES.	Daily Average Per Capita Ounces for All Institutions, Twelve Months, 1909.	Daily Average Per Capita Ounces for All Institutions, Twelve Months, 1910.	Increase.	Decrease.
Butter, . . . . .	.946	.840	—	.100
Butterine, . . . . .	.512	.621	.110	—
Butter and butterine,	1.458	1.461	.003	—
Beans, . . . . .	.886	.816	—	.070
Cereals,	1.854	2.082	.228	—
Eggs, . . . . .	.971	.960	—	.011
Flour,	11.283	10.289	—	.994
Fish,	1.650	1.704	.054	—
Total beef,	4.704	4.619	—	.085
Live beef,	2.339	2.420	.081	—
Lamb and veal, . . . . .	.580	.710	.130	—
Pork,	1.592	1.450	—	.142
Poultry, . . . . .	.230	.239	.006	—
Total meat,	6.932	6.955	.023	—
Milk,	1.208	1.205	—	.003 ¹
Molasses, . . . . .	.025	.022	—	.003
Coffee, . . . . .	.328	.334	.006	—
Tea, . . . . .	.141	.129	—	.012
Granulated sugar,	2.177	2.316	.139	—
Yellow sugar, . . . . .	.303	.293	—	.010
Potatoes,	8.865	9.548	.683	—

¹ Pints.

There was no appreciable variation in the quantity of food on hand at the beginning of the year and at its end.

The following institutions show a noticeable variation in per capita cost from last year, as follows:—

Worcester Hospital (decrease),	\$0 46
Danvers Hospital (increase),	39
Boston Hospital (increase),	13
Worcester Asylum (decrease),	23
Monson Hospital (decrease),	11
Foxborough Hospital (decrease),	18

In the other institutions no difference worthy of comment has occurred, except at Wrentham, where the increased number of patients is responsible for the lower per capita.

At Worcester Hospital the decrease was distributed as follows: —

Salaries, wages and labor,	\$0 12
Food,	18
Heat, light and power,	04
Repairs and improvements,	05
Farm, stable and grounds,	07

The largest variation appears in food. This is accounted for, to an extent, by the fact that the inventory of food on hand at the beginning of the year, compared with the same at its end, shows a diminution in value of \$1,600. Also, there is a diminution in the quantity of food distributed, particularly in meat, where the weekly per capita consumption has fallen nearly an ounce.

With the exception of potatoes, the prices paid for staple food commodities were higher than the preceding year, and to a diminished consumption and depleted stock on hand must be attributed the fall of the per capita cost.

The increase of 39 cents at Danvers is distributed as follows: —

Salaries, wages and labor,	\$0 18
Food,	08
Clothing and clothing material,	04
Furnishings,	09
Repairs and improvements,	04
Farm, stable and grounds,	04
Miscellaneous,	03

Heat, light and power is 11 cents less.

The most notable increase is that of salaries, wages and labor, which is largely in repairs and improvements, 12 of the 18 cents being under this classification.

In accounting for the increase on food, the most important factor to be considered is the markedly increased consumption,

as compared with the previous year, in all staple commodities. Also, that the prices paid for the same, with the exception of eggs, have been higher.

The decrease of 11 cents on heat, light and power is to be accounted for by the fact that the supply of coal on hand at the beginning of the year had at its end become depleted in the amount of approximately \$12,000.

The increase at Boston is distributed as follows:—

Salaries, wages and labor (increase),	\$0 26
Clothing and clothing material (increase),	02
Furnishings (increase),	20
Heat, light and power (decrease),	17
Repairs and improvements (decrease),	07
Farm, stable and grounds (decrease),	08
Miscellaneous (decrease),	03

The largest item, salaries, wages and labor, is divided as follows:—

Ward service,	\$0 18
Repairs and improvements,	08

In the ward service the increased number of attendants in proportion to patients cared for seems to be responsible.

Under repairs and improvements an average increase of \$10 per month in the amount paid to employees has caused the difference.

Heat, light and power is decreased by reason of a diminished consumption of 646 tons of soft coal.

At Worcester Asylum the distribution of decrease is—

Food,	\$0.06
Clothing and clothing material,	01
Furnishings,	04
Heat, light and power,	04
Repairs and improvements,	03
Farm, stable and grounds,	05

The largest decrease is in food. With the exception of butter and beef, the prices paid for all staple foodstuffs have ranged lower than the year preceding.

The consumption of food approximates that of the previous year, and a depletion of stock on hand is a factor to be considered in accounting for the decreased per capita.

On furnishings and clothing, to a slightly depleted stock on hand may be attributed the diminution of per capita.

An analysis of the decrease at Monson shows its distribution to be as follows: —

Salaries, wages and labor (lower),	. . . . .	\$0 01
Food (lower),	. . . . .	10
Clothing and clothing material (lower),	. . . . .	02
Furnishings (lower),	. . . . .	02
Repairs and improvements (lower),	. . . . .	04
Farm, stable and grounds (lower),	. . . . .	07
Heat, light and power (higher),	. . . . .	16

On food the prices paid for staple commodities, with the exception of butter, beef and sugar, have been lower, and the consumption higher, except in flour.

An increase of 1,500 tons of soft coal purchased over the quantity bought in the previous year accounts for the jump in heat, light and power. The reason for this increase is that at the beginning of this year there was no coal on hand, whereas at the beginning of the previous one there was a stock on hand which was consumed before its end.

Heat, Light and Power.

Five institutions which bought the same grade of soft coal as last year, under identical conditions, show an increase in price per ton of same at tide-water of 33 cents. This advance is, however, more than offset and the diminution of per capita cost accounted for by the decrease of quantity on hand, in value \$17,000; also, a lessened consumption as compared with the previous year.

TABLE 7. — Expenses for Maintenance and Net Weekly per Capitas for the Fiscal Year ending Nov. 30, 1910.

INSTITUTIONS.	Average Number of Patients.	SALARIES, WAGES AND LABOR ON PAY ROLL.				FOOD.			
		Gross Expenses.	Receipts.	Net Expenses.	WEEKLY PER CAPITA.				
					1910.	Three Years' Average, 1907-09.			
The insane:—									
State hospitals:—									
Worcester,	1,368	\$110,542 58	\$43 51	\$110,499 07	\$1 5534	\$1 6475	\$80,012 90	\$1,527 09	
Taunton,	971	99,406 88	15 80	99,391 08	1 9684	1 7514	59,587 44	39 31	
Northampton,	847	64,174 84	—	64,174 84	1 4571	1 4646	46,904 97	249 90	
Danvers,	1,427	123,690 29	33 61	123,656 68	1 6664	1 5449	72,381 30	294 78	
Westborough,	1,038	120,162 44	15 70	120,146 64	2 2259	2 0437	60,046 30	338 80	
Boston,	828	92,395 24	4 93	92,390 31	2 1458	—	44,829 69	775 30	
Totals and averages,	6,479	\$610,372 17	\$13 55	\$610,258 62	\$1 8114	\$1 6811 1	\$363,762 60	\$3,225 18	
State asylums:—									
Worcester,	1,122	\$104,698 08	\$26 50	\$104,671 58	\$1 7940	\$1 6080	\$62,127 78	\$63 24	
Medford,	1,656	132,023 30	18 73	132,004 57	1 5329	1 5477	87,038 63	563 93	
Gardner Colony,	610	42,391 64	1 96	42,389 68	1 3364	1 3267	20,455 67	27 55	
Totals and averages,	3,388	\$279,113 02	\$47 19	\$279,065 83	\$1 5840	\$1 5306	\$169,622 08	\$654 72	
Miscellaneous:—									
Totals and averages, hospitals and asylums,	9,867	\$89,485 19	160 74	\$89,324 45	1 7333	1 6262 1	533,384 68	3,379 90	
Monson Hospital,	744	\$71,938 09	\$43 42	\$71,894 67	\$1 8583	\$1 8376	\$40,039 84	\$684 06	
Foxborough Hospital,	325	36,304 60	9 50	36,295 10	2 1477	1 9463	21,584 22	15 89	
School for Feeble-minded at Waltham,	1,342	106,593 61	39 80	106,553 81	1 5269	1 4279	63,837 88	52 41	
Wrentham School,	141	16,427 18	6 63	16,420 55	2 2396	—	6,868 31	1 40	
Totals and averages, miscellaneous, hospitals, asylums and	2,552	\$231,263 48	\$99 35	\$231,164 13	\$1 7419	—	\$132,330 25	\$753 76	
Mental wards, State Infirmary,	12,419	1,120,748 67	260 09	1,120,488 58	1 7351	—	665,714 93	4,633 66	
Bridgewater Hospital,	716	\$39,865 61	\$56 12	\$39,809 49	\$1 0692	—	\$41,399 52	\$10 96	
Totals and averages,	684	26,171 19	658 68	25,512 51	0 7173	—	25,561 24	—	
Aggregates,	1,400	\$66,036 80	\$714 80	\$65,322 00	\$0 8973	—	\$66,960 76	\$10 96	
Totals and averages,	13,819	1,186,785 47	974 89	1,185,810 58	1 6502	—	732,675 69	4,644 62	

1 Exclusive of Boston.

TABLE 7. — *Expenses for Maintenance, etc.* — Continued.

INSTITUTIONS.	FOOD — Con.			CLOTHING AND CLOTHING MATERIAL.				
	Net Expenses.	WEEKLY PER CAPITA.		Gross Expenses.	Receipts.	Net Expenses.	WEEKLY PER CAPITA.	
		1910.	Three Years' Average, 1907-09.				1910.	Three Years' Average, 1907-09.
The insane: —								
State hospitals: —								
Worcester,	\$78,455 81	\$1,1032	\$1,3232	\$12,852 24	\$565 74	\$12,286 50	\$0.1727	\$0.1927
Taunton,	39,548 13	1,1793	1,1879	6,092 06	790 47	5,302 49	0.1050	0.1017
Northampton,	46,655 07	1,0503	1,0584	3,869 02	245 83	3,623 19	0.0823	0.1130
Danvers,	72,086 52	0.9715	0.8723	16,000 48	623 70	15,976 69	0.2153	0.1753
Westborough,	59,707 50	1,1062	1,1685	6,515 33	505 26	6,010 27	0.1114	0.1149
Boston,	44,054 39	1,0232	—	7,864 55	65 45	7,799 10	0.1811	—
Totals and averages,	\$360,537 42	\$1,0701	\$1,1143 1	\$53,794 78	\$2,796 54	\$50,998 24	\$0.1514	\$0.1453 1
State asylums: —								
Worcester,	\$62,064 54	\$1,0638	\$0.9752	\$11,875 65	\$292 54	\$11,583 11	\$0.1985	\$0.2000
Medfield,	86,474 70	1,0042	0.9688	13,840 29	787 42	13,052 87	0.1748	.2060
Gardner Colony,	20,428 12	0.6440	0.7320	5,558 79	214 17	5,344 62	0.1685	.1956
Totals and averages,	\$168,967 36	\$0.9591	\$0.9315	\$33,274 73	\$1,294 13	\$31,980 60	\$0.1815	\$0.2020
Totals and averages, hospitals and asylums,	529,504 78	1,0320	1,0474	87,069 51	4,090 67	82,978 84	0.1617	.1661 1
Miscellaneous: —								
Monson Hospital,	\$39,355 78	\$1,0173	\$1,0374	\$3,312 37	\$280 45	\$3,031 92	\$0.0784	\$0.1102
Foxborough Hospital,	21,568 33	1,2762	1,3192	1,944 42	159 93	1,784 49	0.1056	0.1776
School for Feeble-minded at Waltham,	63,785 47	0.9140	0.9312	16,373 41	396 99	15,976 42	0.2289	0.1598
Wrentham School,	6,866 91	0.9366	—	2,807 59	31 98	2,775 61	0.3785	—
Totals and averages,	\$131,576 49	\$0.9915	—	\$24,437 79	\$869 35 1	\$23,568 44	\$0.1776	—
Totals and averages, hospitals, asylums and miscellaneous,	661,081 27	1,0237	—	111,507 30	4,960 02	106,547 28	0.1650	—
Mental wards, State Infirmary,	\$41,388 56	\$1,1116	—	\$6,597 16	—	\$6,597 16	\$0.1772	—
Bridgewater Hospital,	25,561 24	0.7187	—	7,576 77	—	7,576 77	0.2130	—
Totals and averages,	\$66,949 80	\$0.9197	—	\$14,173 93	—	\$14,173 93	\$0.1947	—
Aggregates,	728,031 07	1,1031	—	125,681 23	\$4,960 02	120,721 21	0.1680	—

¹ Exclusive of Boston.

TABLE 7. — *Expenses for Maintenance, etc. — Continued.*

INSTITUTIONS.		FURNISHINGS.						
		Gross Expenses.	Receipts.	Net Expenses.	WEEKLY PER CAPITA.			
					1910.	Three Years' Average, 1907-09.	Beds, Bedding, Table Linen, etc.	Carpets, Rugs, etc.
The insane:—								
State hospitals:—								
Worcester, . . . . .	.	\$14,394 65	\$50 03	\$14,344 62	\$0.2017	\$0.1837	\$0.1184	\$0.0109
Taunton, . . . . .	.	11,356 05	2 50	11,353 55	0.2248	0.2164	0.1419	0.0227
Northampton, . . . . .	.	4,703 48	—	4,703 48	0.1068	0.1422	0.0556	0.0129
Danvers, . . . . .	.	19,659 27	6 97	19,652 30	0.2648	0.1671	0.1716	0.0049
Westborough, . . . . .	.	9,198 97	41 94	9,157 03	0.1696	0.2423	0.0840	0.0044
Boston, . . . . .	.	17,901 35	27 36	17,873 99	0.4151	—	0.2182	0.0215
Totals and averages,		\$77,213 77	\$128 80	\$77,084 97	\$0.2288	\$0.1893 ¹	\$0.1327	\$0.0119
State asylums:—								
Worcester, . . . . .	.	\$10,514 54	—	\$10,514 54	\$0.1802	\$0.1583	\$0.0976	\$0.0048
Medfield, . . . . .	.	7,924 43	\$72 04	7,852 39	0.0912	0.0928	0.0438	0.0005
Gardner Colony, . . . . .	.	5,329 68	3 51	5,326 17	0.1679	0.1396	0.0615	0.0019
Totals and averages,		\$23,768 65	\$75 55	\$23,693 10	\$0.1345	\$0.1218	\$0.0648	\$0.0022
Totals and averages, hospitals and asylums,		100,982 42	204 35	100,778 07	0.1964	0.1646 ¹	0.1094	0.0086
Miscellaneous:—								
Monson Hospital, . . . . .	.	\$4,490 99	\$2 82	\$4,488 17	\$0.1160	\$0.1583	\$0.0379	\$0.0070
Foxborough Hospital, . . . . .	.	2,108 52	12 63	2,095 89	0.1240	0.2486	0.0696	0.0643
School for Feeble-minded at Waltham, . . . . .	.	9,681 24	105 72	9,575 52	0.1372	0.1561	0.0714	0.0047
Wrentham School, . . . . .	.	2,725 09	—	2,725 09	0.3717	—	0.1367	0.0076
Totals and averages,		\$19,005 84	\$121 17	\$18,884 67	\$0.1423	—	\$0.0650	\$0.0055
Totals and averages, hospitals, asylums and miscellaneous,		119,988 26	325 52	119,662 74	0.1853	—	0.1002	0.0079
Mental wards, State Infirmary, . . . . .	.	\$4,851 58	—	\$4,851 58	\$0.1303	—	—	—
Bridgewater Hospital, . . . . .	.	2,950 21	—	2,950 21	0.0829	—	—	—
Totals and averages,		\$7,801 79	—	\$7,801 79	\$0.1072	—	—	—
Aggregates,		127,790 05	\$325 52	127,464 53	0.1774	—	—	—

¹ Exclusive of Boston.

TABLE 7. — *Expenses for Maintenance, etc.* — Continued.

INSTITUTIONS.	FURNISHINGS — Con.			HEAT, LIGHT AND POWER.			WEEKLY PER CAPITA.	
	WEEKLY PER CAPITA — con.			Receipts.	Net Expenses.	Three Years' Average, 1907-09.	1910.	
	Furniture and Upholstery.	Crockery, Glassware, Cutlery, etc.						
The insane: —								
State hospitals: —								
Worcester,	\$0.0180	\$0.0212	\$20,144.86	—	\$20,144.86	\$0.2832	\$0.2832	\$0.3639
Taunton,	0.0125	0.0149	17,124.77	—	17,124.77	0.3392	0.3392	0.3704
Northampton,	0.0055	0.0084	14,165.18	—	14,165.18	0.3223	0.3223	0.2700
Danvers,	0.0054	0.0190	14,151.54	\$128.59	14,022.95	0.1890	0.1890	0.3263
Westborough,	0.0180	0.0217	25,399.30	20.80	25,378.50	0.4702	0.4702	0.4430
Boston,	0.0041	0.0288	14,249.03	1.05	14,247.98	0.3309	0.3309	—
Totals and averages,	\$0.0186	\$0.0192	\$105,264.68	\$150.44	\$105,114.24	\$0.3120	\$0.3120	\$0.3551 ¹
State asylums: —								
Worcester,	\$0.0044	\$0.0119	\$23,436.03	—	\$23,436.03	\$0.4017	\$0.4017	\$0.4340
Medfield,	0.0017	0.0195	27,639.29	\$150.53	27,538.76	0.3198	0.3198	0.3693
Gardner Colony,	0.0282	0.0158	8,204.18	21.48	8,182.70	0.2579	0.2579	0.3711
Totals and averages,	\$0.0074	\$0.0163	\$59,329.50	\$172.01	\$59,157.49	\$0.3358	\$0.3358	\$0.3903
Totals and averages, hospitals and asylums,	0.0148	0.0182	164,504.18	322.45	164,271.73	0.3202	0.3202	0.3679 ¹
Miscellaneous: —								
Monson Hospital,	\$0.0056	\$0.0238	\$15,948.41	—	\$15,948.41	\$0.4122	\$0.4122	\$0.3532
Foxborough Hospital,	0.0034	0.0100	10,821.84	\$2.50	10,819.34	0.6402	0.6402	0.8700
School for Feeble-minded at Waltham,	0.0203	0.0070	15,588.94	26.29	15,562.65	0.2230	0.2230	0.2435
Wrentham School,	0.1300	0.0301	4,571.99	—	4,571.99	0.6236	0.6236	—
Totals and averages,	\$0.0199	\$0.0136	\$46,931.18	\$28.79	\$46,902.39	\$0.3334	\$0.3334	—
Totals and averages, hospitals, asylums and miscellaneous,	0.0158	0.0172	211,525.36	351.24	211,174.12	0.3270	0.3270	—
Mental wards, State Infirmary,	—	—	\$12,883.99	—	\$12,883.99	\$0.3461	\$0.3461	—
Bridgewater Hospital,	—	—	9,575.29	\$34.90	9,540.39	0.2682	0.2682	—
Totals and averages,	—	—	\$22,459.28	\$34.90	\$22,424.38	\$0.3080	\$0.3080	—
Aggregates,	—	—	233,984.64	386.14	233,598.50	0.3251	0.3251	—

¹ Exclusive of Boston.

TABLE 7. — *Expenses for Maintenance, etc. — Continued.*

HEAT, LIGHT AND POWER — CON.									
COAL.									
INSTITUTIONS.	SOFT.			HARD.			BUCKWHEAT AND SCREENINGS.		
	Quan- tity, Long Tons.	Average Price.	Quan- tity, Long Tons.	Average Price.	Quan- tity, Long Tons.	Average Price.	TOTAL CONSUMPTION WEEKLY PER CAPITA.		
							Quan- tity, Long Tons.	Cost.	Three Years' Average, 1907-09.
The Insane: —									
State asylums: —									
Worcester,	3,969	\$4.437	260	\$6.730	—	—	0.05944	\$0.27221	\$0.3104
Taunton,	3,248	4.313	318	6.030	—	—	0.07062	0.31543	0.3430
Northampton,	3,567	3.586	78	6.318	—	—	0.08275	0.30162	0.3566
Danvers,	2,622	3.046	435	6.195	—	—	0.04119	0.16516	0.3201
Westborough,	4,883	4.084	639	6.305	420	\$2.953	0.11008	0.46714	0.4592
Boston,	2,963	4.298	152	6.737	—	—	0.07234	0.31961	—
Totals and averages,	21,252	\$4.078	1,882	\$6.327	420	\$2.953	0.06901	\$0.29624	\$0.3447 ¹
State asylums: —									
Worcester,	1,394	\$3.938	350	\$6.063	5,047	\$2.861	0.11639	\$0.37806	\$0.4140
Medfield,	3,481	4.262	312	6.001	3,387	2.902	0.08337	0.30818	0.3581
Gardner Colony,	426	4.322	444	6.439	985	3.024	0.05848	0.24209	0.3369
Totals and averages,	5,301	\$4.181	1,106	\$6.198	9,419	\$2.893	0.08983	\$0.31942	\$0.3723
Totals and averages, hospitals and asylums,	26,553	4.098	2,088	6.279	9,839	2.895	0.07675	0.30420	0.3548 ¹
Miscellaneous: —									
Monson Hospital,	3,372	\$4.058	284	\$6.181	—	—	0.09449	\$0.39908	\$0.3418
Foxborough Hospital,	2,516	3.754	61	5.985	—	—	0.15248	0.58053	0.8040
School for Feeble-minded at Waltham,	2,978	4.004	446	6.864	—	—	0.04906	0.21477	0.2257
Wrentham School,	708	4.654	81	7.524	1	\$2.000	0.12002	0.58999	—
Totals and averages,	9,664	\$4.012	872	\$6.641	1	\$2.000	0.07940	\$0.33581	—
Totals and averages, hospitals, asylums and miscellaneous,	36,217	4.075	3,860	6.361	9,840	2.895	0.07729	0.31070	—
Mental wards, State Infirmary,	—	—	—	—	—	—	—	—	—
Bridgewater Hospital,	—	—	—	—	—	—	—	—	—
Totals and averages,	—	—	—	—	—	—	—	—	—
Aggregates,	—	—	—	—	—	—	—	—	—

¹ Exclusive of Boston.

TABLE 7. — *Expenses for Maintenance, etc. — Continued.*

INSTITUTIONS.	REPAIRS AND IMPROVEMENTS.					WEEKLY PER CAPITA.				
	Gross Expenses.	Receipts.	Net Expenses.	1910.	Three Years' Average, 1907-09.	Plumbing, Steam Fitting and Supplies.	Electrical Work and Supplies.	Paints, Oils, Glass, etc.		
The insane:—										
State hospitals:—										
Worcester,	\$18,477 73	\$194 32	\$18,353 41	\$0.2580	\$0.2614	\$0.0276	\$0.0304	\$0.0263		
Taunton,	6,323 71	26 10	6,297 61	0.1247	0.2177	0.0325	0.0122	0.0312		
Northampton,	9,320 96		9,320 96	0.2116	0.1488	0.0372	0.0128	0.0541		
Danvers,	32,558 38	201 54	32,354 84	0.4360	0.3331	0.1524	0.0329	0.0626		
Westborough,	15,548 45	42 20	15,506 25	0.2873	0.2379	0.0321	0.0335	0.0174		
Boston,	7,578 78	88 71	7,490 07	0.1740	—	0.0474	0.0157	0.0497		
Totals and averages,	\$89,806 01	\$482 87	\$89,323 14	\$0.2651	\$0.2501 ¹	\$0.0603	\$0.0245	\$0.0402		
State asylums:—										
Worcester,	\$9,425 84	\$42 48	\$9,383 36	\$0.1608	\$0.2112	\$0.0194	\$0.0066	\$0.0396		
Medfield,	12,917 37	102 43	12,814 94	0.1488	0.1755	0.0294	0.0145	0.0150		
Gardner Colony,	12,729 39	7 10	12,722 29	0.4011	0.2632	0.1337	0.0609	0.0482		
Totals and averages,	\$35,072 60	\$152 01	\$34,920 59	\$0.1982	\$0.2021	\$0.0449	\$0.0202	\$0.0291		
Totals and averages, hospitals and asylums,	124,878 61	684 88	124,243 73	0.2422	0.2332 ¹	0.0550	0.0231	0.0364		
Miscellaneous:—										
Monson Hospital,	\$7,712 62	\$150 01	\$7,562 61	\$0.1955	\$0.2782	\$0.0605	\$0.0311	\$0.0398		
Foxborough Hospital,	7,348 26	98 28	7,251 98	0.4291	0.5152	0.0752	0.0203	0.0561		
School for Feeble-minded at Waltham,	16,547 79	20 06	16,527 79	0.2369	0.2396	0.0491	0.0099	0.0341		
Wrentham School,	2,602 98	—	2,602 98	0.3550	—	0.1094	0.0139	0.0194		
Totals and averages,	\$34,211 65	\$266 29	\$33,945 36	\$0.2558	—	\$0.0591	\$0.0176	\$0.0411		
Totals and averages, hospitals, asylums and miscellaneous,	159,090 26	901 17	158,189 09	0.2449	—	0.0559	0.0219	0.0374		
Mental wards, State Infirmary,	\$11,795 86	—	\$11,795 86	\$0.3168	—	—	—	—		
Bridgewater Hospital,	4,679 79	—	4,679 79	0.1316	—	—	—	—		
Totals and averages,	\$16,475 65	\$901 17	\$16,475 65	\$0.2263	—	—	—	—		
Aggregates,	175,565 91	—	174,664 74	0.2431	—	—	—	—		

¹ Exclusive of Boston.

TABLE 7. — *Expenses for Maintenance, etc.* — Continued.

INSTITUTIONS.	FARM, STABLE AND GROUNDS.					WEEKLY PER CAPITA.				
	Gross Expenses.	Receipts.	Net Expenses.	1910.	Three Years' Average, 1907-09.	Carriages, Wagons and Repairs.	Hay, Grain, etc.	Fertilizers, Vines, Seeds, etc.		
The insane:—										
State hospitals:—										
Worcester,	\$21,533 46	\$4,253 86	\$17,279 60	\$0 2429	\$0 2950	\$0 0332	\$0 0200	\$0 0143		
Taunton,	15,471 74	102 78	15,368 96	0 3044	0 2883	0 0231	0 0199	0 0346		
Northampton,	17,098 46	1,787 05	15,311 41	0 3476	0 3643	0 0023	0 2256	0 0534		
Danvers,	18,162 02	1,365 63	16,796 39	0 2264	0 2536	0 0082	0 1314	0 0373		
Westborough,	16,875 69	342 49	16,533 20	0 3063	0 3219	0 0038	0 2110	0 0232		
Boston,	13,772 94	892 76	12,880 18	0 2992	—	0 0281	0 1185	0 0142		
Totals and averages,	\$102,914 31	\$8,744 57	\$94,169 74	\$0 2705	\$0 2983 ¹	\$0 0168	\$0 1795	\$0 0289		
State asylums:—										
Worcester,	\$17,434 70	\$825 33	\$16,609 37	\$0 2847	\$0 2926	\$0 0109	\$0 1692	\$0 0494		
Medfield,	21,959 09	886 86	21,102 23	0 2451	0 3019	0 0123	0 1031	0 0102		
Gardner Colony,	13,686 30	103 89	13,582 41	0 4282	0 3647	0 0086	0 2287	0 1252		
Totals and averages,	\$53,110 09	\$1,816 08	\$51,294 01	\$0 2912	\$0 3100	\$0 0112	\$0 1916	\$0 0439		
Totals and averages, hospitals and asylums,	156,024 40	10,560 65	145,463 75	0 2835	0 3026 ¹	0 0149	0 1837	0 0341		
Miscellaneous:—										
Monson Hospital,	\$10,944 83	\$1,854 79	\$9,090 04	\$0 2350	\$0 3278	\$0 0161	\$0 1833	\$0 0226		
Foxborough Hospital,	5,940 59	249 72	5,690 87	0 3367	0 4734	0 0064	0 2162	0 0471		
School for Feeble-minded at Waltham,	22,935 96	1,681 49	21,254 47	0 3046	0 3120	0 0122	0 1452	0 0710		
Wrentham School,	5,642 94	28 50	5,614 44	0 7357	—	0 0348	0 2911	0 1493		
Totals and averages,	\$45,464 32	\$3,814 50	\$41,649 82	\$0 3139	—	\$0 0138	\$0 1734	\$0 0581		
Totals and averages, hospitals, asylums and miscellaneous,	201,488 72	14,375 15	187,113 57	0 2897	—	0 0147	0 1816	0 0390		
Mental wards, State Infirmary,	\$4,167 47	\$58 60	\$4,108 87	\$0 1104	—	—	—	—		
Bridgewater Hospital,	7,093 88	417 98	6,675 92	0 1877	—	—	—	—		
Totals and averages,	\$11,261 35	\$476 56	\$10,784 79	\$0 1481	—	—	—	—		
Aggregates,	212,750 07	14,851 71	197,898 36	0 2754	—	—	—	—		

¹ Exclusive of Boston.

TABLE 7. — *Expenses for Maintenance, etc.* — Continued.

MISCELLANEOUS.									
FARM, STABLE AND GROUNDS — CON.			WEEKLY PER CAPITA						
WEEKLY PER CAPITA — CON.			WEEKLY PER CAPITA.						
			Gross Expenses.	Receipts.	Net Expenses.	1910.	Three Years' Average, 1907-09.	Freight, Expressage and Transportation.	Water.
Cows.	Horses.								
The insane: —									
State hospitals: —									
Worcester,	\$0.0018	\$0.0113	\$20,414 49	\$1,332 01	\$19,082 48	\$0.2683	\$0.2516	\$0.0125	\$0.0836
Taunton,	0.0024	—	20,635 07	613 66	20,021 41	0.3965	0.3617	0.0642	0.0834
Northampton,	0.0302	0.0079	11,046 23	642 72	10,403 51	0.2362	0.2458	0.0058	0.0619
Danvers,	0.0152	—	23,296 70	683 72	22,612 98	0.3047	0.3032	0.0351	0.0773
Westborough,	—	0.0088	16,248 79	1,463 35	14,785 44	0.2739	0.3057	0.0516	0.0295
Boston,	0.0278	0.0180	14,953 19	391 03	14,562 16	0.3382	—	0.0017	0.1002
Totals and averages,	\$0.0116	\$0.0071	\$106,594 47	\$5,126 49	\$101,467 98	\$0.3012	\$0.2935 ¹	\$0.0292	\$0.0728
State asylums: —									
Worcester,	\$0.0156	\$0.0148	\$11,807 80	\$298 64	\$11,509 16	\$0.1973	\$0.2327	\$0.0303	\$0.0252
Medfield,	0.0017	—	10,886 35	375 35	10,511 00	0.1221	0.1306	0.0181	—
Gardner Colony,	0.0008	0.0247	8,144 35	355 16	7,789 19	0.2456	0.2161	0.0827	—
Totals and averages,	\$0.0061	\$0.0094	\$30,838 50	\$1,029 15	\$29,809 35	\$0.1692	\$0.1787	\$0.0343	\$0.0083
Totals and averages, hospitals and asylums,	0.0097	0.0079	137,432 97	6,155 64	131,277 33	0.2559	0.2515 ¹	0.0310	0.0507
Miscellaneous: —									
Monson Hospital,	\$0.0128	—	\$13,112 85	\$204 78	\$12,908 07	\$0.3336	\$0.3220	\$0.0372	\$0.0371
Foxborough Hospital,	—	\$0.0192	9,320 26	1,078 69	8,241 57	0.4877	0.6269	0.0744	0.0293
School for Feeble-minded at Waltham,	0.0095	0.0001	20,052 97 ²	303 84	19,659 13 ²	0.2817	0.2474	0.0854	0.0333
Wrentham School,	0.0852	0.0341	3,631 69	93 22	3,538 47	0.4826	—	0.0842	—
Totals and averages,	\$0.0134	\$0.0044	\$46,117 77 ²	\$1,770 53	\$44,347 24 ²	\$0.3342	—	\$0.0699	\$0.0320
Totals and averages, hospitals, asylums and miscellaneous,	0.0105	0.0072	183,550 74 ²	7,926 17	175,624 57 ²	0.2720	—	0.0390	0.0468
Mental wards, State Infirmary,	—	—	\$9,362 85	\$360 21	\$9,002 64	\$0.2418	—	—	—
Bridgewater Hospital,	—	—	7,137 89	268 49	6,869 40	0.1931	—	—	—
Totals and averages,	—	—	\$16,500 74	\$628 70	\$15,872 04	\$0.2180	—	—	—
Aggregates,	—	—	200,051 43 ²	8,554 87	191,496 61 ²	0.2665	—	—	—

¹ Exclusive of Boston.² Includes \$820.89 for sewage disposal.

TABLE 7. — *Expenses for Maintenance, etc. — Continued.*

INSTITUTIONS.	MISCELLANEOUS — Con.				TOTAL MAINTENANCE EXPENSES.		
	WEEKLY PER CAPITA — con.				Gross Expenses.	GROSS WEEKLY PER CAPITA.	
	Funeral Expenses, returning Patients and printing Annual Report.	Chapel Services and Entertainments.	Medicines and Hospital Supplies.	Tobacco.		1910.	Three Years' Average, 1907-09.
The insane: —							
State hospitals: —							
Worcester,	\$0.0131	\$0.0073	\$0.0359	\$0.0127	\$298,372.91	\$4.19	\$4.59
Taunton,	0.0079	0.0279	0.0492	0.0167	235,998.62	4.67	4.52
Northampton,	0.0053	0.0200	0.0188	0.0246	171,313.14	3.89	3.85
Danvers,	0.0034	0.0096	0.0647	0.0157	330,497.98	4.32	4.01
Westborough,	0.0062	0.0144	0.0310	0.0104	269,995.37	5.00	4.87
Boston,	0.0034	0.0351	0.0443	0.0147	213,544.77	4.96	—
Totals and averages,	\$0.0068	\$0.0172	\$0.0423	\$0.0154	\$1,509,722.79	\$4.48	\$4.57 ²
State asylums: —							
Worcester,	\$0.0042	\$0.0137	\$0.0277	\$0.0117	\$251,320.42	\$4.31	\$4.13
Medfield,	0.0057	0.0127	0.0157	0.0103	316,308.75	3.67	3.83
Gardner Colony,	0.0118	0.0208	0.0218	0.0227	116,500.00	3.67	3.63
Totals and averages,	\$0.0063	\$0.0145	\$0.0208	\$0.0130	\$684,129.17	\$3.88	\$3.89
Totals and averages, hospitals and asylums,	0.0066	0.0163	0.0349	0.0146	2,193,851.96	4.27	4.32 ²
Miscellaneous: —							
Monson hospital,	\$0.0084	\$0.0324	\$0.0539	\$0.0157	\$167,500.00	\$4.33	\$4.46
Foxborough Hospital,	0.0157	0.0634	0.0282	0.0425	95,372.71	5.64	6.20
School for Feeble-minded at Waltham,	0.0039	0.0136	0.0200	0.0001	271,611.80 ³	3.89	3.74
Wrentham School,	0.0095	0.0006	0.0321	—	45,277.77	6.17	—
Totals and averages,	\$0.0070	\$0.0260	\$0.0316	\$0.0100	\$579,762.28 ³	\$4.37	—
Totals and averages, hospitals, asylums and miscellaneous,	0.0067	0.0183	0.0342	0.0136	2,773,614.24 ³	4.29	—
Mental wards, State Infirmary,	—	—	—	—	\$130,924.04	\$3.52	—
Bridgewater Hospital,	—	—	—	—	90,746.26	2.55	—
Totals and averages,	—	—	—	—	\$221,670.30	\$3.04	—
Aggregates,	—	—	—	—	2,995,284.54 ³	4.17	—

¹ Includes \$1,220.84 collected by Attorney-General.² Exclusive of Boston.³ Includes \$820.89 for sewage disposal.

TABLE 7. — *Expenses for Maintenance, etc. — Concluded.*

INSTITUTIONS.	TOTAL MAINTENANCE EXPENSES — CON.		MAINTENANCE APPROPRIATION.			Deficiencies.	Balance Reverting to State Treasury.	
	Net Expenses.	NET WEEKLY PER CAPITAL.		Receipts of 1909.	In Addition to Such Receipts.			Total.
		1910.	Three Years' Average, 1907-09.					
The insane: —								
State hospitals: —								
Worcester,	\$290,476 35	\$4,0834	\$4,5190	\$95,994 95	\$250,305 05	\$316,300 00	\$17,927 09	
Taunton,	234,408 00	4,6425	4,4955	36,201 08	199,798 92	236,000 00	1 38	
Northampton,	168,387 64	3,8232	3,8071	46,868 02	146,131 98	193,000 00	21,686 86	
Danvers,	317,159 35	4,2741	3,9758	66,962 52	229,537 48	296,500 00	—	
Westborough,	268,003 99	4,9282	4,8779	70,673 81	199,326 19	270,000 00	4 63	
Boston,	211,298 18	4,9075	—	22,812 95	190,737 05	213,550 00	5 23	
Totals and averages,	\$1,487,733 51	\$4,4158	\$4,3270 ¹	\$309,513 33	\$1,215,836 67	\$1,525,350 00	\$39,625 19	
State asylums: —								
Worcester,	\$249,771 69	\$4,2810	\$4,1120	\$6,037 99	\$245,462 01	\$251,500 00	\$179 58	
Medfield,	313,351 46	3,6589	3,7926	10,386 25	306,413 75	316,800 00	491 25	
Gardner Colony,	115,765 18	3,6496	3,6090	2,085 89	114,414 11	116,500 00	—	
Totals and averages,	\$678,888 33	\$3,6535	\$3,8670	\$18,510 13	\$666,289 87	\$684,800 00	\$670 83	
Totals and averages, hospitals and asylums,	2,166,621 84	4,2227	4,1595 ¹	328,023 46	1,882,126 54	2,210,150 00	40,296 02	
Miscellaneous: —								
Monson Hospital,	\$164,279 67	\$4,2463	\$4,4247	\$27,541 07	\$139,958 93	\$167,500 00	—	
Foxborough Hospital,	93,747 57	5,5472	6,1272	13,349 70	82,050 30	95,400 00	\$27 29	
School for Feeble-minded at Waltham,	268,895 26 ²	3,8532	3,7175	45,617 86	228,203 03	273,820 89 ²	2,209 09	
Wrentham School,	45,116 04	6,1533	—	425 65	48,574 35	49,000 00	3,722 23	
Totals and averages,	\$572,038 54 ²	\$4,3106	—	\$86,934 28	\$498,766 61	\$585,720 89 ²	\$5,958 61	
Totals and averages, hospitals, asylums and miscellaneous,	2,738,660 38 ²	4,2408	—	414,957 74	2,380,913 15	2,795,870 89 ²	46,254 63	
Mental wards, State Infirmary,	\$130,438 15	\$3,5034	—	—	\$131,103 35	\$131,103 35	\$179 31	
Bridgewater Hospital,	89,366 23	2,5125	—	—	90,746 26	90,746 26	—	
Totals and averages,	\$219,804 38	\$3,0193	—	—	\$221,849 61	\$221,849 61	\$179 31	
Aggregates,	2,958,464 76 ²	4,1170	—	\$414,957 74	2,602,762 76	3,017,720 50 ²	46,433 94	

¹ Exclusive of Boston.² Includes \$820.89 for sewage disposal.

WHOLE WEEKLY PER CAPITA COST OF SUPPORT OF A PATIENT.

In the preceding or maintenance table has been given the gross per capita cost of the support of a patient, based on the expenditure under maintenance appropriation, and the net per capita cost based upon this expenditure, minus sums received for sales of property bought with it.

In this table, No. 8, gross cost means the gross cost formerly alluded to plus interest on the investment of the State in real and personal property at the value set upon it in taking the inventory, and at the average rate paid by the State for loans, plus depreciation, which is the sum of wages of mechanics, expenses for repairs and improvements in maintenance appropriation, and sums occurring under special appropriations which have been used to replace depleted or deteriorated property. The net cost is this gross cost minus all receipts, *i.e.*, those for support plus those for sales or refunds under maintenance.

TABLE 8.—Whole Weekly Per Capita Cost of Support of a Patient in the Institutions for the Insane, Feeble-minded, Epileptic and Inebriate, for the Fiscal Year ending Nov. 30, 1910.

INSTITUTIONS.	Average Number of Patients, 1910.	Total Real and Personal Property.	Per Capita Valuation.	WEEKLY PER CAPITA COST.					
				Interest, 3.49 Per Cent.	Deprecia- tion.	Maintenance, exclusive of Repairs and Im- provements.	Gross Cost.	Receipts.	Net Cost.
The Insane: —									
State hospitals: —									
Worcester,	1,368	\$2,120,084 75	\$1,556 35	\$1 04	\$0 46	\$3 73	\$5 23	\$1 03	\$4 20
Taunton,	971	844,633 58	869 86	58	28	4 41	5 27	78	4 49
Northampton,	847	968,906 65	1,073 09	72	35	3 54	4 61	1 17	3 44
Danvers,	1,427	1,826,929 71	1,280 26	86	76	3 56	5 18	87	4 31
Westborough,	1,038	1,011,409 95	974 38	65	43	4 57	5 65	1 45	4 20
Boston,	828	1,238,385 28	1,495 63	1 00	34	4 62	5 96	64	5 32
Totals and averages,	6,479	\$7,959,349 92	\$1,228 48	\$0 82	\$0 47	\$4 02	\$5 31	\$0 99	\$4 32
State asylums: —									
Worcester,	1,122	\$1,162,119 75	\$1,035 76	\$0 69	\$0 39	\$3 91	\$4 99	\$0 16	4 83
Medfield,	1,656	1,717,191 99	1,036 95	69	29	3 38	4 36	11	4 25
Gardner Colony,	610	603,700 82	989 67	66	53	3 14	4 33	08	4 25
Totals and averages,	3,388	\$3,483,012 56	\$1,028 04	\$0 69	\$0 37	\$3 52	\$4 58	\$0 12	\$4 46
Totals and averages, hospitals and asylums,	9,867	11,442,362 48	1,159 66	78	43	3 85	5 06	69	4 37
Miscellaneous: —									
Monson Hospital,	744	\$825,393 96	\$1,109 40	\$0 74	\$0 32	\$4 02	\$5 08	\$0 38	\$4 70
Foxborough Hospital,	325	417,336 50	1,284 11	86	64	5 00	6 50	48	6 02
School for Feeble-minded at Waltham,	1,842	974,835 32	726 40	49	44	3 47	4 40	29	4 11
Wrentham School,	141	305,888 26	2,169 42	1 46	61	5 56	7 63	03	7 60
Totals and averages,	2,552	\$2,523,454 04	\$988 81	\$0 66	\$0 44	\$3 93	\$5 03	\$0 33	\$4 70
Totals and averages, hospitals, asylums and miscellaneous,	12,419	13,965,816 52	1,124 55	75	43	3 86	5 04	62	4 42
Mental wards, State Infirmary,	716	\$518,350 51	\$723 95	\$0 48	\$0 41	\$3 10	\$3 99	\$0 03	\$3 96
Bridgewater Hospital,	684	415,772 13	607 85	41	16	2 39	2 96	05	2 91
Totals and averages,	1,400	\$924,122 64	\$667 23	\$0 45	\$0 29	\$2 75	\$3 49	\$0 04	\$3 45
Aggregates,	13,819	14,899,939 16	1,078 22	72	42	3 75	4 89	56	4 33

RECEIPTS AND EXPENSES ON ACCOUNT OF INSTITUTIONS FOR
THE INSANE, FEEBLE-MINDED, EPILEPTIC AND INEBRIATE.

In the first column, "Increasing Value of Plant," are included all sums expended under special appropriations, adding to property on hand at the beginning of the year.

In column 2, "Expenses which counterbalance Depreciation," are sums expended for salary of mechanics whose services are contributed towards repairs and improvements, sums expended under maintenance for repairs and improvements, and any sums which may have occurred in special appropriations for the same purpose.

In column 3, "Maintenance exclusive of Repairs and Improvements," are all items of maintenance, with repairs and improvements excepted.

"Total Expenses" is a combination of the two preceding columns.

"Total Receipts" are those for support plus those for sales or refunds.

"Net Expenses" are the difference between "Total Expenses" and "Total Receipts."

Except for the fact that it does not take into account the interest charge on the investment, as does the preceding table, this one is a duplicate of it, stated in dollars and cents, whereas the other is reduced to a per capita basis.

1909.		1910.	
Total expenses, .	\$3,438,889 63	Total expenses, .	\$3,542,045 88, an increase of \$103,156 25
Total receipts, .	417,315 91	Total receipts, .	403,417 11, a decrease of 13,898 80
Net receipts, .	\$3,021,573 72	Net expenses, .	\$3,138,628 77, an increase of 117,055 05

TABLE 9. — *Receipts and Expenses on Account of Institutions for the Insane, Feeble-minded, Epileptic and Inebriate for the Fiscal Year ending Nov. 30, 1910.*

	EXPENSES.				Total Receipts.	Net Expenses.
	Increase- ing Value of Plant.	Which counterbalance Depreciation.	Maintenance exclusive of Repairs and Improvements.	Total Expenses.		
State Board of Insanity: —						
Office, travelling and contingent expenses, salaries, and printing an- nual report,	—	—	—	\$44,494 27	\$33 28	\$44,460 99
Transportation and deportation of patients, etc.,	—	—	—	11,230 56	116 53 1	11,114 03
Totals,	—	—	—	\$55,724 83	\$149 81	\$55,575 02
The insane: —						
State hospitals: —						
Worcester,	\$2,114 90	\$33,019 51	\$262,977 00	\$298,111 41	\$73,487 19	\$224,624 22
Taunton,	13,237 05	14,335 53	222,272 81	249,345 39	39,180 24	210,165 15
Northampton,	787 93	15,448 30	155,864 84	172,101 07	51,389 19	120,711 88
Danvers,	7,566 20	56,378 27	264,086 43	328,030 90	64,716 90	263,314 00
Westborough,	56,425 03	23,045 02	243,703 79	323,233 84	78,259 94	244,973 90
Boston,	34,498 73	14,638 80	198,905 97	248,043 50	27,717 03	220,326 47
Totals,	\$114,629 84	\$156,865 43	\$1,347,870 84	\$1,619,366 11	\$334,750 49	\$1,284,615 62
State asylums: —						
Worcester,	\$57,491 55	\$23,030 08	\$228,290 34	\$308,811 97	\$9,207 35	\$299,604 12
Medfield,	17,218 48	24,995 19	291,313 56	333,527 23	9,327 68	324,199 55
Gardner Colony,	25,606 02	16,725 86	99,774 14	142,166 02	2,612 64	139,553 38
Totals,	\$100,376 05	\$64,751 13	\$619,378 04	\$784,505 22	\$21,148 17	\$763,357 05
Totals, hospitals and asylums,	\$215,005 89	\$221,616 56	\$1,967,248 88	\$2,403,871 33	\$355,898 66	\$2,047,972 67

1 Includes \$54.68 for bank balance.

TABLE 9. — *Receipts and Expenses, etc. — Concluded.*

	EXPENSES.				Total Receipts.	Net Expenses.
	Increasing Value of Plant.	Which counterbalance Depreciation.	Maintenance exclusive of Repairs and Improvements.	Total Expenses.		
Miscellaneous:—						
Mental wards, State Infirmary,	—	\$15,420 25	\$115,503 79	\$130,924 04	\$1,203 42	\$129,660 62
Bridgewater Hospital (insane),	\$35,934 80	5,667 64	85,088 62	126,671 06	1,709 60	124,961 46
Monson Hospital (insane),	3,399 32	5,709 32	72,462 01	121,570 34	6,695 80	114,874 74
Foxborough Hospital (insane),	7,907 62	6,816 06	53,342 11	68,065 79	2,143 65	65,922 14
Totals,	\$87,231 63	\$33,633 27	\$326,366 53	\$447,231 43	\$11,812 47	\$435,418 96
Totals, institutions for the insane,	\$302,237 52	\$255,249 83	\$2,293,615 41	\$2,851,102 76	\$367,711 13	\$2,483,391 63
Family care,	—	—	\$33,261 59	\$33,261 59	\$616 65	\$32,644 94
Total for the insane,	\$302,237 52	\$255,249 83	\$2,326,877 00	\$2,884,364 35	\$368,327 78	\$2,516,036 57
Feeble-minded:—						
School for Feeble-minded at Waltham,	\$3,567 03	\$30,874 02	\$242,108 51 ¹	\$276,549 56 ¹	\$20,469 04	\$256,080 52 ¹
Wrentham School,	\$2,396 25	4,511 93	40,765 84	127,674 02	222 38	127,451 64
Totals for the feeble-minded,	\$55,963 28	\$35,385 95	\$282,874 35	\$404,223 58	\$20,691 42	\$383,532 16
Epileptic:—						
Monson Hospital (sane),	\$49,652 69	\$6,531 98	\$82,903 23	\$139,087 90	\$8,025 40	\$131,062 50
Hospital Cottages for Children,	—	—	12,641 03	12,641 03	245 60	12,395 43
Totals for the epileptic,	\$49,652 69	\$6,531 98	\$95,544 26	\$151,728 93	\$8,271 00	\$143,457 93
Inebriate:—						
Foxborough Hospital,	\$4,628 85	\$3,989 89	\$31,224 65	\$39,843 39	\$5,977 10	\$33,866 29
Insane hospitals,	—	—	6,160 80	6,160 80	—	6,160 80
Totals for the inebriate,	\$4,628 85	\$3,989 89	\$37,385 45	\$46,004 19	\$5,977 10	\$40,027 09
Aggregates,	\$442,482 34	\$301,157 65	\$2,742,681 06	\$3,542,045 88	\$403,417 11	\$3,138,628 77

¹ Includes \$820.89 for sewage.

EXPENDITURES FROM SPECIAL APPROPRIATIONS.

The expenditures under this head are for extensions and additions to property possessed by the State at the beginning of the year, and in the accompanying table are divided into construction, furnishing and equipping (as applied to buildings and betterments).

Under the recently formed rule, which has been very rigidly adhered to this year, no special appropriation shall be for the purpose of refurnishing wards or devoted to other uses properly chargeable to maintenance appropriation. The amount expended here, therefore, should result in an increase of the property of the State.

TABLE 10. — *General Statement as to Special Appropriations.*

INSTITUTIONS.	Whole Appropriations.	Land.	EXPENDED DURING FISCAL YEAR ENDING NOV. 30, 1910.			
			FOR CONSTRUCTION.		BUILDINGS FOR NURSES.	
			BUILDINGS FOR PATIENTS.		BUILDINGS FOR NURSES.	
			New and Additions.	Repairs.	New and Additions.	Repairs.
The insane:—						
State hospitals:—						
Worcester,	\$13,600 00	—	\$1,915 18	—	—	—
Taunton,	86,700 00	—	3,014 01	\$1,174 28	—	—
Northampton,	24,900 00	—	—	—	—	—
Danvers,	11,000 00	—	—	—	—	—
Westborough,	140,475 00	—	47,533 43	—	\$306 96	—
Boston,	938,000 00	\$472 66	27,886 65	—	—	—
Totals,	\$1,234,675 00	\$472 66	\$80,349 27	\$1,174 28	\$306 96	—
State asylums:—						
Worcester,	\$180,100 00	—	\$2,102 56	—	\$5,782 66	—
Medfield,	69,500 00	—	—	—	—	—
Gardner Colony,	42,350 00	—	11,914 79	—	3,480 08	—
Totals,	\$291,950 00	—	\$14,017 35	—	\$9,262 74	—
Totals, hospitals and asylums,	1,526,625 00	\$472 66	94,366 62	\$1,174 28	9,569 70	—
Miscellaneous:—						
Monson Hospital,	\$146,040 00	\$740 00	\$63,717 57	—	—	—
Foxborough Hospital,	185,000 00	—	7,175 02	—	—	—
School for Feeble-minded at Waltham,	11,500 00	—	3,567 03	\$1,370 73	—	—
Wrentham School,	355,500 00	—	28,317 26	—	\$7,421 77	—
Totals,	\$698,040 00	\$740 00	\$102,776 88	\$1,370 73	\$7,421 77	—
Totals, hospitals, asylums and miscellaneous,	2,224,665 00	1,212 66	197,143 50	2,545 01	16,991 47	—
Mental wards, State Infirmary,	—	—	—	—	—	—
Bridgewater Hospital,	\$105,000 00	—	\$32,876 24	—	\$940 29	—
Totals,	\$105,000 00	—	\$32,876 24	—	\$940 29	—
Aggregates,	\$305,000 00	\$1,212 66	\$32,876 24	\$2,545 01	\$17,931 76	—
	2,329,665 00		230,019 74			

TABLE 10. — *General Statement as to Special Appropriations — Continued.*

INSTITUTIONS.	EXPENDED DURING FISCAL YEAR ENDING NOV. 30, 1910 — CON.						FOR FURNISHING AND EQUIPPING.	
	FOR CONSTRUCTION — CON.						FOR PATIENTS.	
	BUILDINGS FOR FARM, STABLE AND GROUNDS.		ALL OTHER BUILDINGS.		TOTAL BUILDINGS.		First Furnishing and Equipping.	Repairs and Renewals.
	New and Additions.	Repairs.	New and Additions.	Repairs.	New and Additions.	Repairs.		
The insane: —								
State hospitals: —								
Worcester,	—	—	—	—	\$1,915 18	—	\$199 72	—
Taunton,	\$1,527 92	—	—	—	4,541 93	\$1,174 28	—	—
Northampton,	—	—	—	—	—	—	—	—
Danvers,	—	—	\$7,566 20	—	7,566 20	—	—	—
Westborough,	—	—	328 84	—	48,169 23	—	7,662 85	—
Boston,	—	—	6,139 42	—	34,026 07	—	—	—
Totals,	\$1,527 92	—	\$14,034 46	—	\$96,218 61	\$1,174 28	\$7,862 57	—
State asylums: —								
Worcester,	—	—	\$35,653 69	—	\$43,538 91	—	—	—
Medfield,	—	—	5,582 22	—	5,582 22	—	—	—
Gardner Colony,	\$1,505 32	—	—	—	16,900 19	—	\$357 65	—
Totals,	\$1,505 32	—	\$41,235 91	—	\$66,031 32	—	\$357 65	—
Totals, hospitals and asylums,	3,033 24	—	55,270 37	—	162,239 93	\$1,174 28	8,220 22	—
Miscellaneous: —								
Monson Hospital,	\$449 99	—	\$23,529 73	—	\$37,697 29	—	—	—
Foxborough Hospital,	—	—	—	—	7,175 02	—	—	—
School for Feeble-minded at Waltham,	—	—	—	—	3,567 03	\$1,370 73	—	—
Wrentham School,	3,706 22	—	21,875 43	—	61,320 68	—	\$6,926 76	—
Totals,	\$4,156 21	—	\$45,405 16	—	\$159,760 02	\$1,370 73	\$6,926 76	—
Totals, hospitals, asylums and miscellaneous,	7,189 45	—	100,675 53	—	321,999 95	2,545 01	15,146 98	—
Mental wards, State Infirmary,	—	—	—	—	—	—	—	—
Bridgewater Hospital,	—	—	—	—	—	—	—	—
Totals,	—	—	—	—	\$33,816 53	—	—	—
Aggregates,	\$7,189 45	—	\$100,675 53	—	\$33,816 53	\$2,545 01	\$15,146 98	—
					\$35,816 48			

TABLE 10.—General Statement as to Special Appropriations—Continued.

EXPENDED DURING FISCAL YEAR ENDING NOV. 30, 1910 — Con.											
INSTITUTIONS.		For Furnishing and Equip- ping — Con.		For Betterments.							
		TOTALS.		WATER SUPPLY, EXCLUSIVE OF PLUMBING IN BUILDINGS.		SEWERAGE, EXCLUSIVE OF PLUMBING IN BUILDINGS.		HEATING, EXCLU- SIVE OF APPURTENANCES IN BUILDINGS.			
		First Furnishing and Equipping.	Repairs and Renovals.	Extension.	Repairs.	Extension.	Repairs.	Extension.	Repairs.	Extension.	Repairs.
The insane: —											
State hospitals: —											
Worcester, . . . . .	.	\$199 72	—	—	—	—	—	—	—	—	—
Taunton, . . . . .	.	—	—	—	—	—	—	—	—	—	—
Northampton, . . . . .	.	—	—	\$762 93	—	—	—	—	—	—	—
Danvers, . . . . .	.	—	—	—	—	—	—	—	—	—	—
Westborough, . . . . .	.	8,255 80	—	—	—	—	—	—	—	—	—
Boston, . . . . .	.	—	—	—	—	—	—	—	—	—	—
Totals, . . . . .	.	\$8,455 52	—	\$762 93	—	\$8,695 12	—	—	—	—	—
State asylums: —											
Worcester, . . . . .	.	—	—	\$5,048 73	—	\$6,186 94	—	\$1,400 00	—	—	—
Medfield, . . . . .	.	—	—	3,432 60	—	7,418 61	—	795 05	—	—	—
Gardner Colony, . . . . .	.	\$857 65	—	8,408 18	—	—	—	—	—	—	—
Totals, . . . . .	.	\$857 65	—	\$16,879 51	—	\$13,605 55	—	\$2,195 05	—	—	—
Totals, hospitals and asylums, . . . . .	.	8,813 17	—	17,642 44	—	22,300 67	—	2,195 05	—	—	—
Miscellaneous: —											
Monson Hospital, . . . . .	.	—	—	—	—	—	—	—	—	—	—
Foxborough Hospital, . . . . .	.	\$2,887 92	—	\$491 14	—	\$4,614 61	—	—	—	—	—
School for Feeble-minded at Waltham, . . . . .	.	—	—	—	—	—	—	—	—	—	—
Wrentham School, . . . . .	.	14,939 02	—	3,705 04	—	—	—	\$1,501 11	—	—	—
Totals, . . . . .	.	\$17,806 94	—	\$4,196 18	—	\$4,614 61	—	\$1,501 11	—	—	—
Totals, hospitals, asylums and miscellaneous, . . . . .	.	26,620 11	—	21,838 62	—	26,915 28	—	3,696 16	—	—	—
Mental wards, State Infirmary, . . . . .	.	—	—	—	—	—	—	—	—	—	—
Bridgewater Hospital, . . . . .	.	\$2,108 27	—	—	—	—	—	—	—	—	—
Totals, . . . . .	.	\$2,108 27	—	—	—	—	—	—	—	—	—
Aggregates, . . . . .	.	28,728 38	—	\$21,898 62	—	\$26,915 28	—	\$3,696 16	—	—	—

TABLE 10. — General Statement as to Special Appropriations — Concluded.

INSTITUTIONS.	EXPENDED DURING FISCAL YEAR ENDING NOV. 30, 1910 — Con.					Total Expenditures to Date.	Balance at End of Current Fiscal Year.	Reverted Balances.
	MISCELLANEOUS.			TOTAL EXPENDITURES.				
	Adding to Original Value.	Repairs and Renewals.		Adding to Original Value.	Repairs and Renewals.				Total Expenditures during Fiscal Year.
The insane: —								
State hospitals: —								
Worcester,	—	—	\$2,114 90	—	—	\$13,600 00	—	—
Taunton,	—	—	13,237 05	\$1,174 28	—	18,485 54	\$63,214 46	—
Northampton,	\$25 00	—	787 93	—	—	24,285 32	86 84	\$527 84
Danvers,	—	—	7,566 20	—	—	7,566 20	3,433 80	—
Westborough,	—	—	56,425 03	—	—	94,401 41	46,073 59	—
Boston,	—	—	34,498 73	—	—	115,524 65	842,475 35	—
Totals,	\$25 00	—	\$114,629 84	\$1,174 28	—	\$273,863 12	\$960,284 04	\$527 84
State asylums: —								
Worcester,	\$1,316 97	—	\$57,491 55	—	—	\$130,393 83	\$49,684 05	\$21 52
Medfield,	—	—	17,218 48	—	—	35,466 62	33,996 73	36 65
Gardner Colony,	—	—	25,666 02	—	—	39,266 73	3,068 65	14 42
Totals,	\$1,316 97	—	\$100,376 05	—	—	\$205,127 18	\$86,750 23	\$72 59
Totals, hospitals and asylums,	1,341 97	—	215,005 89	\$1,174 28	—	478,990 30	1,047,034 27	600 43
Miscellaneous: —								
Monson Hospital,	—	\$106 54	\$93,051 90	\$106 54	—	\$131,967 17	\$14,001 75	\$71 08
Foxborough Hospital,	\$2,002 39	—	12,536 47	—	—	134,400 86	50,581 87	17 27
School for Feeble-minded at Waltham,	—	—	3,567 03	1,370 73	—	11,498 40	1 60	—
Wrentham School,	930 40	—	82,396 25	—	—	287,596 55	67,837 86	15 59
Totals,	\$2,932 79	\$106 54	\$191,551 65	\$1,477 27	—	\$565,462 98	\$132,471 48	\$105 54
Totals, hospitals, asylums and miscellaneous,	4,274 76	106 54	406,557 54	2,651 55	—	1,044,453 28	1,179,505 75	705 97
Mental wards, State Infirmary,	—	—	\$35,924 80	—	—	\$47,599 20	\$57,400 79	\$0 01
Bridgewater Hospital,	—	—	\$35,924 80	—	—	\$47,599 20	\$57,400 79	\$0 01
Totals,	—	—	\$35,924 80	—	—	1,092,052 48	1,236,906 54	705 98
Aggregates,	\$4,274 76	\$106 54	442,482 34	\$2,651 55	—	—	—	—

ANALYSIS OF PAY ROLL.
TABLE 11. — *Comparative Analysis of Pay Roll, by Departments.*

INSTITUTIONS.	MEDICAL SERVICE.					WARD SERVICE.			
	AVERAGE NUMBER PERSONS.		AVERAGE MONTHLY COMPENSATION.		AVERAGE WEEKLY PER CAPITA COST.	Full Roster Males.	AVERAGE NUMBER PERSONS, MALES.		Full Roster Females.
	In Service, 1910.	Average Three Years, 1907-09.	1910.	Average Three Years, 1907-09.			In Service, 1910.	Average Three Years, 1907-09.	
The insane: —									
State hospitals: —									
Worcester,	15	12.57	\$87 14	\$84 39	\$0 1848	80	66.05	57.02	80
Taunton,	13	11.96	73 31	74 77	0 2084	60	61.85	55.13	68
Northampton,	6	6.00	108 33	109 51	0 1771	45	33.77	32.99	50
Danvers,	14	13.23	79 79	80 75	0 1831	70	53.94	56.75	89
Westborough,	15	14.42	86 90	89 54	0 2786	72	61.93	49.25	97
Boston,	11	8.06	93 71	—	0 2105	51	45.20	—	86
Totals and averages,	74	66.24	\$85 84	\$85 31 ¹	\$0 2025	378	322.74	251.14 ¹	470
State asylums: —									
Worcester,	9	9.14	\$81 46	\$83 32	\$0 1531	63	58.07	45.31	68
Medfield,	6	6.59	104 55	108 03	0 0960	61	61.37	53.80	107
Gardner Colony,	3	2.93	128 20	132 65	0 1421	35	33.06	29.29	17
Totals and averages,	18	18.66	\$96 96	\$100 32	\$0 1232	159	152.50	128.40	192
Totals and averages, hospitals and asylums,	92	84.90	\$88 28	\$88 97 ¹	\$0 1753	537	475.24	379.54 ¹	662
Miscellaneous: —									
Monson Hospital,	6	5.43	\$112 12	\$117 78	\$0 1888	43	42.99	40.37	40
Foxborough Hospital,	5	5.21	112 06	105 62	0 4146	22	21.45	21.90	—
School for Feeble-minded at Waltham,	5	5.12	141 54	129 13	0 1246	26	24.21	24.56	131
Wrentham School,	2	1.57	162 94	—	0 4187	2	1.07	—	20
Totals and averages,	18	17.33	\$125 39	—	\$0 1965	89	89.72	—	180
Totals and averages, hospitals, asylums and miscellaneous,	110	102.23	\$94 57	—	\$0 1797	626	564.96	—	842

¹ Exclusive of Boston.

TABLE 11. — Comparative Analysis of Pay Roll, by Departments — Continued.

WARD SERVICE — Con.													
INSTITUTIONS.		AVERAGE NUMBER PERSONS, FEMALES.		Full Roster Totals.	AVERAGE NUMBER PERSONS, TOTALS.		NUMBER OF PATIENTS TO ONE NURSE.						
		In Service, 1910.	Average Three Years, 1907-09.		In Service, 1910.	Average Three Years, 1907-09.	MALES.		FEMALES.		TOTALS.		
							1910.	Average Three Years, 1907-09.	1910.	Average Three Years, 1907-09.	1910.	Average Three Years, 1907-09.	
The insane:—													
State hospitals:—													
	Worcester,	69.49	69.31	160	135.54	126.33	10.56	10.56	9.66	8.54	10.10	9.45	
	Taunton,	68.71	65.13	128	130.56	120.26	8.42	9.35	6.55	6.71	7.44	7.92	
	Northampton,	36.51	36.82	95	70.28	69.81	12.92	12.37	11.23	11.03	12.04	11.63	
	Danvers,	75.73	70.62	159	129.67	127.37	11.12	10.24	10.93	10.78	11.01	10.54	
	Westborough,	97.50	82.26	169	159.43	131.51	6.53	7.51	6.50	6.98	6.51	7.18	
	Boston,	75.37	—	137	120.57	—	7.83	—	6.29	—	6.87	—	
Totals and averages,		423.31	324.14 ¹	848	746.05	575.28 ¹	9.33	9.84 ¹	8.19	8.52 ¹	8.68	9.10 ¹	
State asylums:—													
	Worcester,	62.61	46.03	131	120.68	91.34	8.91	10.78	9.65	11.74	9.29	11.26	
	Medfield,	105.59	99.59	168	166.96	153.39	10.88	10.82	9.35	9.42	9.92	9.91	
	Gardner Colony,	17.30	13.25	52	50.36	42.54	12.26	11.59	11.86	12.55	12.12	11.88	
Totals and averages,		185.50	158.87	351	338.00	287.27	10.43	10.95	9.69	10.31	10.02	10.59	
Totals and averages, hospitals and asylums,		608.81	483.01 ¹	1,199	1,084.05	862.55 ¹	9.69	10.20 ¹	8.64	9.11 ¹	9.10	9.59 ¹	
Miscellaneous:—													
	Monson Hospital,	40.10	34.65	83	83.09	75.02	8.44	8.49	9.50	8.54	8.95	8.51	
	Foxborough Hospital,	—	—	22	21.45	21.90	15.15	13.07	—	—	15.15	13.07	
	School for Feeble-minded at Waltham,	132.77	119.45	157	156.98	144.01	7.06	—	8.82	—	8.55	—	
	Wrentham School,	12.72	—	22	13.79	—	16.82	—	9.67	—	10.22	—	
Totals and averages,		185.59	—	269	275.31	—	9.77	—	9.02	—	9.27	—	
Totals and averages, hospitals, asylums and miscellaneous,		794.40	—	1,468	1,359.36	—	9.70	—	8.73	—	9.13	—	

¹Exclusive of Boston.

TABLE 11. — *Comparative Analysis of Pay Roll, by Departments* — Continued.

INSTITUTIONS.	WARD SERVICE — CON.							GENERAL ADMINISTRATION.				
	AVERAGE MONTHLY COMPENSATION.							AVERAGE WEEKLY PER CAPITA COST.		Full Roster.	Average Number Persons.	
	MALES.		FEMALES.		TOTALS.			1910.	Average Three Years, 1907-09.			
	1910.	Average Three Years, 1907-09.	1910.	Average Three Years, 1907-09.	1910.	Average Three Years, 1907-09.	In Service, 1910.					Average Three Years, 1907-09.
The insane:—												
State hospitals:—												
Worcester,	\$26 04	\$26 37	\$23 58	\$21 50	\$24 78	\$23 69		\$0 5667	\$0 5798	78	76 53	69 49
Taunton,	29 43	28 32	24 75	23 27	26 96	25 59		0 8366	0 7509	82	78 01	78 99
Northampton,	30 01	28 40	25 85	23 84	27 85	25 94		0 5334	0 5159	43	44 58	41 49
Danvers,	27 96	27 83	23 85	23 25	25 56	25 29		0 5360	0 5548	76	70 49	63 51
Westborough,	28 93	27 95	23 45	21 31	25 58	23 80		0 9067	0 7735	95	86 35	79 20
Boston,	28 28	—	24 93	—	26 18	—		0 8799	—	53	51 09	—
Totals and averages,	\$28 29	\$27 70 ¹	\$24 23	\$22 45 ¹	\$25 99	\$24 74 ¹		\$0 6905	\$0 6285 ¹	427	407 05	332 68 ¹
State asylums:—												
Worcester,	\$26 32	\$25 99	\$23 33	\$21 21	\$24 76	\$23 59		\$0 6147	\$0 4930	87	82 19	62 16
Medfield,	30 03	29 56	24 93	23 77	26 80	25 79		0 6237	0 6026	127	120 44	115 52
Gardner Colony,	27 96	26 53	19 30	20 92	24 98	24 79		0 4760	0 4820	43	38 94	31 70
Totals and averages,	\$28 17	\$27 60	\$23 86	\$22 78	\$25 80	\$24 93		\$0 5941	\$0 5459	257	241 57	209 38
Totals and averages, hospitals and asylums,	\$28 25	\$27 67 ¹	\$24 11	\$22 56 ¹	\$25 93	\$24 81 ¹		\$0 6574	\$0 5983 ¹	684	643 62	542 06 ¹
Miscellaneous:—												
Monson Hospital,	\$32 65	\$29 72	\$25 88	\$24 39	\$29 38	\$27 25		\$0 7572	\$0 7387	57	49 38	46 91
Foxborough Hospital,	30 83	30 37	—	—	30 83	30 37		0 4696	0 5411	37	37 88	29 98
School for Feeble-minded at Waltham,	30 70	29 65	25 73	24 21	26 49	25 13		0 7152	0 6751	57	51 97	51 73
Wrentham School,	29 14	—	23 14	—	23 61	—		0 5329	—	16	11 80	—
Totals and averages,	\$31 65	—	\$25 58	—	\$27 56	—		\$0 6861	—	167	151 03	—
Totals and averages, hospitals, asylums and miscellaneous,	\$28 79	—	\$24 46	—	\$26 26	—		\$0 6633	—	851	799 65	—

¹ Exclusive of Boston State Hospital.

TABLE 11. — *Comparative Analysis of Pay Roll, by Departments — Continued.*

INSTITUTIONS.	GENERAL ADMINISTRATION — Con.				REPAIRS AND IMPROVEMENTS.			
	AVERAGE MONTHLY COMPENSATION.		AVERAGE WEEKLY PER CAPITA COST.		AVERAGE NUMBER PERSONS.		AVERAGE MONTHLY COMPENSATION.	
	1910.	Average Three Years, 1907-09.	1910.	Average Three Years, 1907-09.	Full Roster.	In Service, 1910.	Average Three Years, 1907-09.	Average Weekly Per Capita Cost.
The insane: —								
State hospitals: —								
Worcester,	\$20 36	\$31 35	\$0.3791	\$0.4211	15	13.13	\$92 29	\$0.2044
Taunton,	33 48	30 44	0.6207	0.5855	9	7.30	78 05	0.1354
Northampton,	33 43	33 51	0.4060	0.3960	8	6.96	73 36	0.1391
Danvers,	39 70	35 85	0.4526	0.4247	30	23.93	82 96	0.1935
Westborough,	36 49	34 57	0.7003	0.6760	9	8.63	94 22	0.1389
Boston,	48 01	—	0.6336	—	10	8.63	68 17	0.1640
Totals and averages,	\$36 24	\$33 59 ¹	\$0.5254	\$0.4933 ¹	81	66.58	\$77 37 ¹	\$0.1515 ¹
State asylums: —								
Worcester,	\$30 95	\$35 22	\$0.5232	\$0.4900	19	13.95	\$82 64	\$0.2332
Medfield,	31 14	30 16	0.5226	0.5307	16	14.77	72 28	0.1534
Gardner Colony,	32 97	31 92	0.4557	0.4628	8	4.21	71 26	0.0923
Totals and averages,	\$31 37	\$31 67	\$0.5162	\$0.5057	43	32.93	\$75 72	\$0.1623
Totals and averages, hospitals and asylums,	\$34 43	\$32 84	\$0.5222	\$0.4979 ¹	124	99.51	\$76 72 ¹	\$0.1555 ¹
Miscellaneous: —								
Monson Hospital,	\$35 65	\$30 41	\$0.5461	\$0.5161	6	4.64	\$79 42	\$0.1143
Foxborough Hospital,	31 68	32 48	0.8521	0.7909	10	9.76	29 52	0.2046
School for Feeble-minded at Waltham,	36 09	33 33	0.3225	0.3216	10	9.58	112 69	0.1857
Wrentham School,	33 28	—	0.7265	—	2	1.62	98 20	0.2603
Totals and averages,	\$34 96	—	\$0.4775	—	28	25.60	\$74 04	\$0.1714
Totals and averages, hospitals, asylums and miscellaneous,	\$34 53	—	\$0.5131	—	152	125.11	\$78 80	\$0.1532

¹ Exclusive of Boston State Hospital.

TABLE 11. — *Comparative Analysis of Pay Roll, by Departments* — Continued.

INSTITUTIONS.		FARM, STABLE AND GROUNDS.					
		AVERAGE NUMBER OF PERSONS.		AVERAGE MONTHLY COMPENSATION.		AVERAGE WEEKLY PER CAPITA COST.	
		In Service, 1910.	Average Three Years, 1907-09.	1910.	Average Three Years, 1907-09.	1910.	Average Three Years, 1907-09.
The insane:—		Full Roster.					
State hospitals:—							
Worcester,		45	41.84	\$29 37	\$29 57	\$0.2190	\$0.2306
Taunton,		19	18.08	39 43	37 57	0.1677	0.1682
Northampton,		21	20.34	40 99	39 00	0.2015	0.2300
Danvers,		29	28.44	40 11	38 55	0.1865	0.1889
Westborough,		27	27.76	32 71	32 31	0.2014	0.2217
Boston,		20	21.59	34 55	—	0.2079	—
Totals and averages,		161	136.46 ¹	\$35 08	\$34 53 ¹	\$0.1977	\$0.2083 ¹
State asylums:—							
Worcester,		37	42.81	\$30 70	\$30 70	\$0.2703	\$0.2638
Medfield,		35	35.43	30 50	29 57	0.1506	0.1563
Gardner Colony,		6	5.89	47 83	45 66	0.1066	0.1196
Totals and averages,		78	84.13	\$31 81	\$31 26	\$0.1823	\$0.1858
Totals and averages, hospitals and asylums,		239	242.82	33 94	33 35 ¹	0.1924	0.2001 ¹
Miscellaneous:—							
Monson Hospital,		28	22.19	\$36 75	\$36 04	\$0.2530	\$0.2626
Foxborough Hospital,		11	10.45	27 94	29 86	0.2073	0.2002
School for Feeble-minded at Waltham,		36	30.39	34 34	31 27	0.1795	0.1753
Wrentham School,		5	5.33	34 63	—	0.3021	—
Totals and averages,		80	68.36	\$34 17	—	\$0.2112	—
Totals and averages, hospitals, asylums and miscellaneous,		319	310.68	33 99	—	0.1962	—

¹ Exclusive of Boston State Hospital.

TABLE 11. — *Comparative Analysis of Pay Roll, by Departments — Concluded.*

INSTITUTIONS.		ALL PERSONS EMPLOYED.								
		Full Roster.	AVERAGE NUMBER OF PERSONS.		NUMBER OF PERSONS TO ONE EMPLOYEE.		AVERAGE MONTHLY COMPENSATION.		AVERAGE WEEKLY PER CAPITA COST.	
			In Service, 1910.	Average Three Years, 1907-09.	1910.	Average Three Years, 1907-09.	1910.	Average Three Years, 1907-09.	1910.	Average Three Years, 1907-09.
The insane:—										
State hospitals:—										
	Worcester,	313	281.98	262.17	4.85	\$32.67	\$32.46	\$1 5540	\$1 6475	
	Taunton,	251	245.72	231.04	3.95	33.71	31.09	1 9638	1 7515	
	Northampton,	173	145.86	145.17	5.80	36.66	35.37	1 4571	1 4628	
	Danvers,	308	266.08	248.04	5.36	38.74	36.17	1 6669	1 5450	
	Westborough,	315	294.53	255.36	3.52	34.00	32.44	2 2262	2 0443	
	Boston,	231	209.94	—	3.94	36.67	—	2 1459	—	
Totals and averages,		1,591	1,444.11	1,141.78 ¹	4.49	\$35.22	\$33.35 ¹	\$1 8117	\$1 6810 ¹	
State asylums:—										
	Worcester,	288	268.77	210.23	4.17	\$32.46	\$33.48	\$1 7945	\$1 6081	
	Medfield,	352	344.19	323.92	4.81	31.96	31.38	1 5331	1 5477	
	Gardner Colony,	112	102.33	85.68	5.97	34.52	33.87	1 3364	1 3266	
Totals and averages,		747	715.29	619.83	4.74	\$32.52	\$32.40	\$1 5843	\$1 5307	
Totals and averages, hospitals and asylums,		2,338	2,150.40	1,761.61 ¹	4.57	\$34.33	\$33.02 ¹	\$1 7336	\$1 6261 ¹	
Miscellaneous:—										
	Monson Hospital,	180	164.73	151.38	4.52	\$36.39	\$33.59	\$1 8504	\$1 8376	
	Foxborough Hospital,	85	84.75	66.41	3.83	35.70	36.37	2 1482	1 9465	
	School for Feeble-minded at Waltham,	265	254.04	239.39	5.28	34.97	31.99	1 5275	1 4279	
	Wrentham School,	47	34.11	—	4.13	40.13	—	2 2405	—	
Totals and averages,		577	537.63	—	4.75	\$35.85	—	\$1 7427	—	
Totals and averages, hospitals, asylums and miscellaneous,		2,915	2,697.03	—	4.60	\$34.63	—	\$1 7355	—	

¹ Exclusive of Boston State Hospital.

STATE BOND TABLE.

Bonds outstanding Dec. 1, 1910, on account of institutions for the insane, feeble-minded, epileptic and inebriate under the supervision of the State Board of Insanity amounted to \$6,686,900, an increase during the year of \$792,850.

The annual interest charge was \$233,155.75, an increase of \$43,513.16.

The detail as applied to the different institutions will be found in the following tabulation: —

TABLE 12. — *State Bonds outstanding Dec. 1, 1910.*

INSTITUTIONS.	LOANS.				INTEREST.		Loan Sinking Fund.
	Period in which Bonds were issued.	Period in which Bonds mature.	Amount Dec. 1, 1910.	Increase for the Year.	1910.	Increase for the Year.	
The insane:—							
State hospitals:—							
Worcester,	1901-1907	1931-1936	\$158,000 00	—	\$5,530 00	—	Prisons and hospitals.
Taunton,	1901-1906	1931-1936	245,600 00	—	8,401 00	—	Prisons and hospitals.
Northampton,	1901-1907	1931-1937	179,000 00	—	6,195 00	—	Prisons and hospitals.
Danvers,	1901-1908	1931-1937	232,400 00	—	7,964 00	—	Prisons and hospitals.
Westborough,	1901-1910	1931-1939	449,300 00	\$60,000 00	13,462 50	\$2,100 00	Prisons and hospitals.
Boston,	1902-1910	1939—	1,600,000 00	520,000 00	56,000 00	33,963 91	Prisons and hospitals.
Totals,	—	—	\$2,864,300 00	\$580,000 00	\$99,552 50	\$36,063 91	
State asylums:—							
Worcester,	1902-1910	1931-1939	\$443,000 00	\$72,500 00	\$15,505 00	\$2,537 50	Prisons and hospitals.
Medfield,	1894-1907	1924-1936	1,469,800 00	—	51,443 00	—	Medfield asylum.
Gardner Colony,	1902-1910	1931-1939	462,550 00	22,350 00	16,189 25	782 25	Prisons and hospitals.
Totals,	—	—	\$2,375,350 00	\$94,850 00	\$83,137 25	\$3,319 75	
Totals, hospitals and asylums,	—	—	5,239,650 00	674,850 00	182,689 75	39,383 66	
Miscellaneous:—							
Monson Hospital,	1895-1910	1925-1939	\$666,450 00	\$118,000 00	\$21,973 00	\$4,129 50	Prisons and hospitals.
Foxborough Hospital,	1906-1907	1935-1	130,000 00	—	5,000 00	—	Prisons and hospitals.
School for Feeble-minded at Waltham,	1902-1908	1931-1937	405,000 00	—	15,150 00	—	Prisons and hospitals.
Wrentham School,	1906-1909	1936-1938	245,800 00	—	8,343 00	—	Prisons and hospitals.
Totals,	—	—	\$1,447,250 00	\$118,000 00	\$50,466 00	\$4,129 50	
Totals, hospitals, asylums and miscellaneous,	—	—	6,686,900 00	792,850 00	233,155 75	43,513 16	

: At the option of the State Treasurer.

SEMIANNUAL CONFERENCES.

The twenty-third semiannual conference of the Board and the trustees of the different institutions was held at the State House, on May 17, 1910. Dr. Herbert B. Howard, chairman of the Board, presided. There were present: —

Dr. Henry R. Stedman, trustee, Taunton State Hospital.
Miss Frances M. Lincoln, trustee, Worcester State Hospital.
Dr. E. V. Scribner, superintendent, Worcester State Asylum.
Dr. S. B. Woodward, trustee, Worcester State Hospital.
Dr. E. E. Southard, pathologist, State Board of Insanity.
Mrs. M. W. Stedman, trustee, Monson State Hospital.
Mrs. A. M. Spring, trustee, Gardner State Colony.
Mrs. Amie H. Coes, trustee, Gardner State Colony.
Chas. S. Shattuck, trustee, Northampton State Hospital.
Dr. Edward French, superintendent, Medfield State Asylum.
Dr. C. A. Drew, superintendent, City Hospital, Worcester.
Mrs. Nellie B. Palmer, trustee, Medfield State Asylum.
Miss Annie M. Kilham, trustee, Danvers State Hospital.
Miss Mary W. Nichols, trustee, Danvers State Hospital.
Miss Sarah B. Williams, trustee, Westborough State Hospital.
Miss Eliza C. Durfee, trustee, Westborough State Hospital.
Helen R. Smith, trustee, State Infirmary and State Farm.
Mrs. Anna F. Prescott, trustee, State Infirmary and State Farm.
Dr. John H. Nichols, superintendent, State Infirmary.
Dr. S. L. Eaton, superintendent, Highland Hall, Newton Highlands.
Wm. T. Piper, trustee, Boston State Hospital.
Dr. Charles W. Page, superintendent, Danvers State Hospital.
Seward W. Jones, trustee, Danvers State Hospital.
S. Herbert Wilkins, trustee, Danvers State Hospital.
Dr. Orville F. Rogers, trustee, Danvers State Hospital.
Dr. Henry P. Frost, superintendent, Boston State Hospital.
Dr. Owen Copp, executive officer, State Board of Insanity.
Dr. Lowell F. Wentworth, deputy executive officer, State Board of Insanity.
Dr. D. H. Fuller, assistant to executive officer, State Board of Insanity.
Dr. Herbert B. Howard, chairman, State Board of Insanity.
Mr. William F. Whittemore, member, State Board of Insanity.
Dr. Michael J. O'Meara, member, State Board of Insanity.

The subject for discussion was: The duty of an institution to the community it serves.

The views of the different speakers as expressed at this conference were as follows: —

Dr. Henry R. Stedman, superintendent of "Bourne-wood:" — If the question of the duty of a public institution for the insane toward the community it serves had been put to us some dozen years ago, we should probably have replied that its only obligation to the public was the proper care and treatment of its inmates while and only while they were in the hospital. We should have added in defence of our position that the situation was precisely similar to that of the general hospital for physical diseases, where, except for the previous history of the patient, the hospital physician did not at that time concern himself in any way with his life outside the hospital. But a little later people awakened to the need of doing something more than treat the developed and, in a large measure, incurable disease in the hospital, and in "after-care" of the discharged patient sought to attack the root causes of insanity, with a view to prevent or delay the return of the disease by regulating and improving the patient's home surroundings and other conditions in which the trouble originated. It was, however, but a few years ago that the well-nigh universally accepted belief in the practicability of this measure took shape in active, organized effort, and now in the State of New York, according to the fourth annual report of the subcommittee of the State Charities Aid Association on Prevention and After-care, there are four committees, each composed of members of the State Charities Aid Association and medical officers of four of the larger State hospitals. The work of relief and other assistance for these unfortunates from the hospital, as told in the detailed reports of cases helped, is of great interest and promise, particularly that of the committee connected with the Manhattan State Hospital, which alone employs a paid agent.

In common with many others, I believe that Massachusetts should take up this work, of which a beginning might be made by employing a trained social worker in connection with one of our larger hospitals. In fact, we shall have no excuse for not doing so. The general hospital can no longer be instanced as an example of the policy of confining medical work within its walls, and is furnishing the most convincing proof of the need and value of such supplementary and preventive work at the homes of patients coming to the hospital for treatment.

Most of us are familiar with the recent developments in the way of social service or convalescent relief work, organized departments of which are in effective operation in great hospitals like the Massachusetts General of Boston, the Bellevue of New York, Johns Hopkins in Baltimore and University of Pennsylvania Hospital in Philadelphia. They are equipped with trained agents who visit the homes of the patients while they are in the hospital and after they have returned, "in order" (notice how exactly this description also fits the needs of the discharged insane patient) "to prevent their being again subjected to the influences which caused their disease, and assist them in establishing themselves under normal conditions of life and labor." Social service work as a rational, practical adjunct for alleviating suffering among the sick poor, completing cures and preventing relapses is surely fast extending, and bids fair to be adopted in all large general hospitals as an indispensable department of hospital work.

Insanity takes root in just such conditions as are found in the families visited by the social worker. In fact, as is well known, unfavorable environment always plays a prominent part in its causation, far more so than in that of bodily disease. In connection with no other disease is the physician's understanding of the patient's previous manner of life more essential to intelligent treatment, as the report above quoted truly says, and in no class of homes could a social worker undertake more preventive and ameliorative work than in those homes where either an inherited family tendency or an existing mode of life has already sent at least one member of the household to an institution for the insane.

There is also a minor duty of the hospital to the discharged patient which is often — I might say usually — overlooked. I refer to the giving of medical advice on his departure from the hospital. I believe it to be not only a helpful duty but in line with the ordinary thoughtfulness of the physician to make inquiry of such patients individually, or of their relatives, as to the kind of life, surroundings and occupation to which they are returning, and to give appropriate advice. This would also be of much precautionary help toward selecting proper cases

for outside assistance or after-care. I am told that on most patients such advice would be simply thrown away. But will it? That is certainly not our experience with the well-to-do patient, as a rule, who, when once he has suffered an attack of insanity, is especially grateful for and amenable to such advice through fear of relapse. At all events, even the most sceptical will admit that a little personal interest shown at this time will long be remembered, and is creditable to the physician and the hospital alike.

Another obligation devolving upon our institutions for the insane is the supervision and visitation of patients from the hospital who are boarded out in the neighborhood by the State. This is another work which ought to be included in the duties of the social worker. By the proximity of the hospitals to the families in which such patients are placed, not only could supervision be more effectively and intelligently exercised, but friendly relations could also be established which might be both advantageous to the patient and particularly helpful to the repute of the institution in the community, which would be thus given an object lesson in the interest taken by the hospital authorities in the insane who are boarded out from the hospital in the families about it. In fact, until social work of this kind is entered upon, it seems most desirable that such supervision should be taken up by the medical officers of our hospitals who are already available. The institution can certainly be in closer touch with the families in its neighborhood than the agents of the State Board of Insanity, although their work has been done with remarkable thoroughness under the circumstances. It was with this idea in mind, I believe that the Board, by securing appropriate legislation a few years ago, sought the co-operation of the hospitals in the supervision of the boarded-out insane in their respective neighborhoods. At present, if I am rightly informed, only the Northampton State Hospital has entered upon this important field of work.

I cannot do better in closing than to quote some of the views of Dr. Adolph Meyer, the late director of the New York Pathological Institute and now director of the psychopathic institu-

tion in Baltimore to be created by the Phipps fund. He says: "The more I see of after-care and prophylaxis, the more clearly do I see that it is in the interest of the hospital to be the leading element of the after-care organization and prophylaxis organization in its district. To my mind the hospital has been too much a continuation of the almshouse, doing the best it can for the cases that are brought in and dumped down. To-day we know that even with the best of care we cannot rest there. The hospital is the place where the experience is collected such as creates obligations, and the hospital ought to be under the responsibility to use that experience."

Dr. Everett Flood, superintendent of Monson State Hospital: — It seems that for the most part in former years no duty has been recognized. If the officers of the institution conducted the work economically, with satisfaction to the families of its patients, no further duty was apparent.

There appears to have been, as a rule, very little community of interests between the hospital management and the physicians in the immediate neighborhood. I have no doubt there have been many exceptions to this, but there have been undoubtedly many places where this holds true. In my own experience I cannot recall that twenty years ago we felt or had impressed upon us as assistant physicians that we were an integral part of the physician body. Our own routine was about all that we could attend to, and to read an occasional paper before the district or local society covered the obligations felt to such medical acquaintances.

The idea that we have a social duty, a professional duty, a financial duty, which we owe to such physicians seems to be a growth of recent years. Even now the duty is scarcely recognized in some places.

Each institution has a large collection of material which is withdrawn from the experience of the community doctor, by the very fact that an institution is created for the care of such special cases. These should certainly be open for the attention and study of every physician who is properly interested in the cases. We should take pains to offer this material and to devise

means by which the physician will see the advantage of his giving them attention. I take it that the institution trustees should look to it that the medical staff does not neglect any such duty.

We should invite the physicians to see the cases, and to confer with us on every possible occasion, for their own benefit and for the benefit of our patients. It sometimes seems that these efforts on our part are not appreciated, or that they are utterly ignored. It seems to me that one of our most urgent duties is to help to bring about a realization of the value of this opportunity. If our neighbors fail to accept our invitations, it is all the more our duty to patiently invite them again and again, and, above all, not to allow any feeling of resentment at the repeated refusals to influence us in the slightest degree. I cannot imagine any condition which would cause us to remove the name of a neighboring physician from our list short of his absolute request that we do so, that we cease to trouble him by our regular invitations whenever we have anything of interest to show.

If we cannot think of any special points that would be interesting to such neighbors, it is our duty as officers of a public establishment to develop some matters which will be of interest.

We ought to be able to be of some use to the physicians in occasional consultations. They must sometimes have cases which we can advise about. We should be on such terms with them that they will freely call on us for any service we are able to render.

If teaching opportunities offer, the institution men ought to have a share of this burden on their shoulders. Classes of undergraduates in several departments from the colleges are now regular visitors at many institutions, and these clinical opportunities can be made occasions for physicians near to come in for an hour.

We should have a supply of nurses trained for the use of the institution, and ready to go out whenever the neighboring doctor is in urgent need of such aid. This might be infrequent, but on the whole should be not less than an average of three hundred and sixty-five days a year for one nurse in the com-

munity. The duty performed to the community will also be a duty to the institution itself in furnishing needed experience to the nurses in the field outside of hospital work.

Finally, to convince the doctors and the community itself that the hospital management is one of intelligence and integrity is a positive duty. Unfavorable criticisms or even slighting remarks from a doctor of the town can always unsettle confidence in us to a large degree, and the disposition to do this when it is undeserved should be headed off by any tactful and straightforward means in our power.

Dr. Walter E. Fernald, superintendent of Massachusetts School for the Feeble-minded: — I was impressed by what Dr. Flood said, that about twenty years ago little was made of this point. We who were assistant physicians rather understood that when our duty with our particular division of the hospital was over we had fulfilled our obligations. There has been a very great change in the past twenty years.

In our institution we are near the city and our material is used a good deal in a clinical way. We have had this year thirty-three clinics or clinical lectures before students from the medical schools, the normal schools and the classes for social workers, and from the colleges themselves. from the pathological and psychological departments in Wellesley, Harvard and Simmons. In fact, this clinical work has become quite a burden. The thirty clinics meant thirty halfdays, or half of the working time for a working month, but the trustees feel and the staff feels that perhaps that is as important as any other duty that we are called upon to perform, and we very cheerfully and willingly do this, and feel that it is a part of our obligation to the profession and the community.

We do another thing which brings us in touch with the physicians in the city. It is understood that one day a week we are glad to see patients (feeble-minded children) and to advise about their education and care, so on Thursdays we have a number of patients who are brought by their friends, or are sent by physicians, practically as an out-patient clinic. They are seen by the physicians, and in some cases the treatment and training are carried out under our advice at home

for a very long time. We have cases who have been coming for seven or eight years who perhaps would have become public charges if their friends had not been able to obtain the advice and assistance of the school staff.

With regard to the relation of the institution to the discharged patient, we have had a feeling that perhaps we were not fulfilling our duty. With all classes of mental disease it is rather a complicated problem to keep in touch with the recovered patient or the patient who has very much improved; that is especially true with the feeble-minded. The patient who has come to us and done well and who goes home, not cured, but greatly improved and able to make a fairly good attempt at independent, individual self-care, is apt to be very sensitive about referring to his period of hospital care and treatment. The more complete the recovery, the more sensitive he is about recalling the institution conditions. We are, however, in touch with a large number of former patients who come back at intervals, — once in three months or once in six months, and sometimes a longer period.

The practice of discharging on probation we are carrying out more than ever before. We have a relatively large number of patients who are not discharged but who are taken home with the understanding that they are to report at regular intervals, and as long as they are doing well they are allowed to remain at home. In that way the influence of the institution is applicable, and I am sure it has a very wholesome effect in many cases.

Dr. John A. Houston, superintendent of Northampton Hospital: — Our first and most important duty is our attitude toward our patients and their relatives. Kind treatment of patients by physicians and nurses; courteous and patient consideration of the suggestions and complaints of friends and relatives, will disarm public fear and apprehension of State institutions. This is trite of course, but it should always be kept in mind that every patient is an advertisement in favor of or against an institution.

With respect to the third topic under discussion: one of the things we can easily do, and in fact have frequently done, is to

make public the facts in regard to insanity, its causes, prevention and treatment. by talks to gatherings of physicians, men's clubs, etc., in a way easily understood. This is accomplished by inviting physicians and men of standing to visit the hospital, and by the holding of clinics and of meetings of medical societies at the hospital, as, indeed, is frequently done.

For years I have personally given advice freely to any person who was willing to come to the hospital for that purpose. I am now considering the advisability of sending a circular letter to the physicians of the territory we serve, calling attention to our willingness to give advice free here at the hospital and in deserving cases at the homes of patients. My experience has been that patients whom we have seen and advised to come to the hospital, if they come, are apt to be more contented here; to have a better feeling toward the institution; to consider that they are being treated in a hospital rather than detained in an asylum. I would also call attention to the wise provision permitting of voluntary admissions, which does not yet seem to be widely known either by the public or the physicians.

It might well be the duty of the hospital to send one of its physicians, upon request, to consult with the family physician in cases where commitment is being considered; also to visit patients who are away on trial visit, or who have been discharged, to take note of their surroundings and manner of life and to advise accordingly.

It is the part of wisdom for the hospital physicians to keep in communication with the discharged patient, and most institutions in the State are now doing this by letter and by encouraging patients out on trial visit to come back to the hospital for an interview and examination.

Much could be said in elaboration of the views expressed if I had time, also of the use we might make of the public press and of the possibly neglected use of our annual reports.

Dr. Ernest V. Scribner, superintendent of Worcester Asylum: — My ideas are so much in accord with the statements that have been made in the letters and papers which have been read, and the comments made by the gentlemen who have read them, that I really can do but little more than indorse what has

been said. I do think the general practitioner in the community has not been in close enough contact with the institution and its methods. Of course this is a day of specific methods and specialization. We should not be out of contact and out of sympathy with the general practice of medicine because that is what we all of us must fall back on, and I really think myself that the general practitioner is usually a better rounded-out man than the specialist. I am heartily of the opinion that they should be invited to come to the institution and see what we are doing.

In institution work there is a great deal which to the physician in general practice does not seem like medical work, but which we at the institution realize is medical work. Such, for example, is the regulation of the habits and the general conduct of our patients. If the general practitioners knew a little more about that alone it would be better for their patients and the community. We should work in closer accord.

With reference to the discharged patients and their friends, my ideas upon that subject are, perhaps, to a greater degree theoretical than those of some of the gentlemen connected with institutions where there are a great many acute patients.

We have a few discharges of recovered patients, and I have always found that the more nearly recovered the patient, the more cordial was his attitude toward the institution and the more ready he was to return to the institution for advice. We have always made it plain to patients who have formerly been with us and have come back to call that we were glad to see them and wished them to come. We give them an opportunity to see their former friends and associates, and to see what is going on in the institution. We feel that their influence over the remaining patients is good. They feel kindly toward the institution, and a visit from those people has a good effect upon the patients in the hospital.

As to the attitude of the institution in the matter of serving as a source of information and advice, I agree heartily with what has been said. I believe we should lose no opportunity to give advice and assistance, not only to the physician but to the patients and friends of patients. I think the law which

allows patients to be discharged conditionally, permitting them to return at the end of six months, is a good one. I am rather in the habit of advising patients who have improved under our care to such an extent that they are able to go out, not to secure immediate discharge, but to continue on trial visit, and to feel that the door of the institution is open to them for a refuge, and that they can come back to remain or to talk it over and get advice.

Dr. Charles A. Drew, superintendent of Worcester City Hospital: — When you have new troubles and worries sometimes the old troubles appear in different light. I came here to-day, not to say anything upon the subject but to get the inspiration that I have in the past from these meetings. Dr. O'Meara told me about the subject to be discussed to-day, and it seemed a very broad and interesting question.

The word "duty" on paper looks small, but when you consider it in all its branches it certainly seems very large. When it was my privilege to be associated with the State institution at Bridgewater, one of the most interesting and helpful features of my work there was the very cordial and friendly relations which we physicians in the institution had with the physicians in general practice in Plymouth County. I do not know that it was helpful to the physicians outside, but it was certainly helpful to us, and I have very pleasant memories of the friendship and helpfulness which kept us very well in touch with general medicine, which is not an unimportant feature of our hospital work. As I have said many times, I think the more closely we keep in touch with the treatment and cure of general diseases, the more helpful we are to our patients.

It is sometimes very difficult to furnish nurses for the outside profession when we are short ourselves as we occasionally are.

It is practical and helpful to keep in close personal touch with our patients, and with the physicians who usually see the patients before we do.

Dr. Owen Copp, executive officer, State Board of Insanity: — I am inclined to think that we have obligations to the public which take us outside of the institution. Our patients and their friends who visit them come to know the institution and its

officers and to realize that nowhere else will they find so much sympathy, friendliness and help, but the general public does not have this knowledge, and therefore does not look upon them in the same light. It will do so when we go outside and get into closer touch with the community.

An attack of mental disease marks a crisis in the life of the patient and his family. They are in distress and need advice. Naturally they should turn to the hospital for it, but at present they do not. The court intervenes with legal formalities, safeguarding the right of personal liberty of the patient. The attitude of the hospital itself is usually passive, it being deemed rather improper to facilitate in any way the admission of the patient. These precautions delay treatment, suggest something objectionable to guard against, excite suspicion and apprehension.

Attention should be diverted from these things to the helpful aspect of the hospital. The hospital should manifest an interest in the patient before his reception, should give advice to his friends, and stand ready to render any proper assistance. Although care should be exercised in admitting patients, restrictions should be sufficiently relaxed to provide for their temporary treatment, on the recommendation of a physician, for a few days while necessary legal requirements are met.

Should such restrictions be relaxed, an obvious duty would be imposed. The medical officers of the hospital would need to guard against the reception and detention of unsuitable patients. A thorough and systematic review of the history and condition of each one should be made at regular intervals. None should be kept unless his condition or welfare should require. We should not wait for the question of discharge to be raised by outside parties, but the initiative should be taken by us. In the absence of friends and good home environment, organized effort should be exerted to supply the lack. Each institution might have its social worker and eventually other paid assistants, supplemented by unpaid volunteer workers in as many main centers of population as possible.

The expense should be met out of a special appropriation distinct from that of maintenance. It would be moderate and

abundant return would be received in the greater number of patients leaving the institutions.

Such a corps of workers would establish the right relation of the hospital to the community. They would endeavor to find good homes and employment for discharged patients who cannot do wholly for themselves. They would befriend them in many ways and prolong their stay outside of the institution. They would come to know the families and homes of the patients, the causes which led to their mental breakdown or their relapse after recovery. They would trace out the heredity and other factors important in the study and prevention of mental disease.

Each institution might well assume the duty of placing friendless and homeless patients in suitable private families, as is now done by the State Board. In this field a great advance seems likely to be made in the near future.

Mrs. Susanna W. Berry, trustee of Wrentham State School:—I am well aware that my opinion on the subject under discussion, from a scientific point of view, is of no value, yet as I come from a great industrial city, and am in close touch with the industrial workers—in close touch with the common people,—I think I can understand in a degree the needs of this class of people, and they surely are the ones who demand all the aid and sympathy that the State can give.

The old fears and prejudices against our insane hospitals. against all our public institutions, excepting our city hospitals, are not wholly overcome, and the distrust of them and the management in general still exists. I find many of our poor, overburdened mothers loath to allow their mentally deficient offspring to enter the schools for feeble-minded children from distrust in regard to their treatment. To do more effective work this feeling of suspicion must be overcome. A State law recently enacted, compelling cities and towns to appoint physicians to visit at stated periods the public schools, and examine into the condition of the children as regards contagious diseases, treatment of the ears and eyes, has proved of great value. Why could not the superintendents of our State institutions advise with these school doctors concerning the heredity, mental condition and environment of special cases in our schools, thus

getting into personal touch with the mode of living of many who later enter our State institutions? Annually the teachers of the State come together at county conventions to discuss the best methods of developing the child life; why not present those hereditary taints, such as are most commonly transmitted by "parental alcoholism" and "syphilis," by the able superintendents of our State institutions to the great body of public teachers assembled to learn the best methods of broadening the child life?

Dr. Henry Lefavour, trustee of Boston Hospital:—I did not come prepared to say anything to-day because I am not as familiar with the relations of the institutions to the public as the other representatives of the institutions who are here.

I have been impressed, however, in the development of the plans of the psychopathic department of the Boston State Hospital, with the emphasis that is laid particularly on these very points which have been considered this morning. In the first place, under the law which has just been passed by the Legislature patients are to be taken to it as to a general hospital,—the words are expressly stated,—not under commitment but for treatment, and to be retained there as long as they need treatment, exactly as Dr. Copp has just suggested; secondly, the provision for the social service to which Dr. Copp has referred, by which the best disposition of these patients may be determined, their previous history ascertained as completely as possible and provision made for their future as quickly as may be; thirdly, the large provision for out-patient work. All these are in the direction, I think, of making the hospitals for the insane true hospitals, institutions to which the people are to go when they are in trouble and find relief; not places to which they are sent, but rather where they are to be received, to be helped and to be made fit for whatever may be in store for them.

Now, this particular provision for Boston may seem special, but the hope, I think, of those who are most interested in its foundation is not that it should be a special provision for Boston, but that it should lead the way for all parts of the State; that all the institutions shall rightly claim similar privileges and similar facilities, until the whole Commonwealth shall have

some of the advantages which this most crowded district is to have and certainly needs.

Dr. Elmer E. Southard, pathologist to the State Board of Insanity: — The State institutions are now charged with one duty to the medical profession which the future will absolve them from — the *duty of educating the profession in psychiatry*. In the future we may look to medical schools to give their students adequate instruction in clinical as well as in theoretical psychiatry. As it stands, however, we are all aware that the general practitioner is apt to know far more about sleeping sickness in Uganda or Bilharzia in Egypt than about dementia præcox in Massachusetts.

As a matter of fact, I have always found the general practitioner thirsty enough for facts about mental disease, and more thirsty than some of the professional neurologists, of whom it may truly be said that their little knowledge is a dangerous thing. The new lore of psychotherapy is absorbed rapidly and in the main effectively by the general practitioner, who may be expected to treat more rationally the cases of sexual aberration and certain cases of delusion formation which left him formerly quite in the dark.

Some of our institutions have deliberately sought to establish close relations with the medical profession of the vicinity. At first social, these relations have become in some instances really educational. The opening of routine or occasional clinics to the local profession is a good step in that it indispensably aids us in *the campaign of social service and after-care* which the modern world has opened. For it appears to me that we must build around the parish practitioner if we are to attack the after-care problem with intent to secure a durable social structure, and not a mere frill to go out of fashion shortly.

I believe, then, that our attitude to the local profession commands much of our campaign with discharged patients. We must show our activities and interests to the general practitioner of our districts, and through him work upon the public. Whether any permanent good can be obtained by more direct grappling with the public on these matters is perhaps doubtful. Such lectures as the Harvard Medical School *popular lectures*

are of some service, though my own experience was disturbing. Having spoken of the normality of certain delusions, and *not* having spoken of Colonel Roosevelt. I was approached afterward by a reporter who demanded "What's the matter with Roosevelt?" I replied conservatively that he was a normal but exceptional person, but was headlined next day as "Doctor on Roosevelt;" "Roosevelt intensely normal." The accounts of my lecture grew progressively wilder the farther west they wandered, until a Chicago paper reported that Dr. Southard alleged that Colonel Roosevelt's ego was made up of harmless delusions, with which statement Wall Street would not agree. I consequently feel that it is best to postpone the public and foster psychiatry in the profession.

Of course the new psychopathic hospital, if it prove the *model diagnostic and therapeutic institution* which we hope, will be a tremendous aid in this campaign with the profession. The especial strength of this institution will lodge in its employment of the proved methods of internal medicine in all cases, so that the practitioner can see that there is no border-line between internal medicine and psychiatry, and that the statement at the outset of most text-books in psychiatry, "Psychiatry is a branch of internal medicine," is a true statement. When the practitioner further sees the methods of internal medicine and clinical pathology supplemented by those of applied physiology and psychology, and perceives that, *e.g.*, the quality of heart action and the height of blood pressure actually dictate the kind of therapy employed, and that the special psychological type of excitement shown by a patient commands or countermands the prolonged bath treatment, he will begin to be persuaded to try to tell one insanity from another at his own bedsides. If our psychopathic hospital does no more than show the local profession that the legal conception of a one and only *insanity* has been replaced by a medical conception of *the insanities* in the plural number, having concrete methods of diagnosis, very varied prognoses and highly differentiated therapeutics, our hospital will have gained its point. Such hospitals must multiply.

Dr. John H. Nichols, superintendent of State Infirmary:—

There is just one point that I want to speak of, and that is in regard to this friendly relation that it has been advocated we should cultivate with the physicians, etc., of our communities. It seems as if we have got to be a little careful, for after all there is a very delicate balance here that we must not upset.

Now in our section the conditions were somewhat different twelve, fifteen or twenty years ago from what they are at the present time; in the earlier days the assistant physicians at our institution used to be in constant relation with the community, and it is of late years that they have been getting more out of touch with it, for the reason that in the earlier days there was no physician in the town, and we had to take care of the people, all those suffering from general diseases, as well as those in the community of the boarded-out insane; but of late years we have had a physician in the town, and if we continued our previous activities it would interfere much with his practice. I would say this, we are in most friendly relation with that physician. I suppose he comes to our institution or to our laboratory four or five days in every week, and the fact of his coming to town has lightened the burden on our shoulders very much, because we did feel the responsibility of that whole section surrounding us there. It seems to me that if our institution should open up and have out-patients and clinics, and give free advice in all of these matters, we should very soon draw in a large portion of the community, and it is a question as to whether the medical profession would not feel that we were going a step too far. In regard to the physicians of the somewhat larger circle than just our town, that is, in the Middlesex North District Society, they have made a practice for quite a good many years of holding their summer outing at our institution, and of course many of them are interested in what is going on in our wards and visit them very carefully, but as it is the summer time and their outing, it is usually planned that they should find as much to interest them on the ball field and elsewhere outside as inside of the hospital wards.

Dr. John G. Blake, trustee of Gardner Colony: — Knowing as a physician the work that is being done by the Board. what is being done at the present time and what is intended to be

done in the future, I could not rest satisfied without showing and expressing my deep sense of approbation. When this new hospital comes it will open a new phase of the treatment of insanity. We shall get at the preventive stage. This is the age of reform in medicine, and this institution must come in touch and move on. I have no doubt that we shall attain to a considerable degree of success. When this movement starts here, it is going throughout the country, and the example of Boston will be very widely felt.

I was instrumental in introducing instruction in hygiene in the schools. It took ten years to start it, but once started here in Boston it has spread throughout the State. When it comes to the treatment of insanity, and the superb scientific research now in operation, I look forward with great pleasure to the future treatment and the prevention, to some extent, of insanity in the United States.

The twenty-fourth semiannual conference was held at the State House on Nov. 15, 1910. Dr. Herbert B. Howard, Chairman of the Board, presided. There were present:—

- Dr. E. V. Scribner, superintendent, Worcester State Asylum.
Miss Annie M. Kilham, trustee, Danvers State Hospital.
Miss Mary W. Nichols, trustee, Danvers State Hospital.
Mrs. Elizabeth C. M. Gifford, trustee, Taunton State Hospital.
Dr. Everett Flood, superintendent, Monson State Hospital.
Charles S. Shattuck, trustee, Northampton State Hospital.
Mrs. James B. Case, trustee, Hospital Cottages for Children.
Miss Eliza C. Durfee, trustee, Westborough State Hospital.
H. S. Morley, trustee, Hospital Cottages for Children.
George B. Dewson, trustee, Westborough State Hospital and Hospital Cottages for Children.
Dr. Walter E. Fernald, superintendent, Massachusetts School for the Feeble-minded.
Mrs. Luann L. Brackett, trustee, Massachusetts School for the Feeble-minded.
Dr. H. W. Page, superintendent, Hospital Cottages for Children.
Lyman A. Ely, trustee, Worcester State Hospital.
Dr. Charles E. Thompson, superintendent, Gardner State Colony.
Dr. E. E. Southard, pathologist, State Board of Insanity.
George N. Harwood, trustee, Gardner State Colony.
Miss Sarah B. Williams, trustee, Westborough State Hospital.

Mrs. Mary P. Townsley, trustee, Monson State Hospital.
Mrs. James H. Newton, trustee, Northampton State Hospital.
Dr. Edward Mellus, superintendent, Newton Nervine.
Dr. Henry P. Frost, superintendent, Boston State Hospital.
Dr. H. W. Mitchell, superintendent, Danvers State Hospital.
Dr. George S. Adams, superintendent, Westborough State Hospital.
Dr. Edward French, superintendent, Medfield State Asylum.
John McQuaid, trustee, Northampton State Hospital.
Dr. Geo. L. Wallace, superintendent, Wrentham State School.
William Taggard Piper, trustee, Boston State Hospital.
Dr. Mabel D. Ordway, superintendent, "Glenside," Jamaica Plain.
Dr. John H. Nichols, superintendent, State Infirmary.
Edmund A. Whitman, trustee, Gardner State Colony.
George W. Gay, M. D., trustee, Wrentham State School.
Dr. John A. Houston, superintendent, Northampton State Hospital.
Dr. Wm. N. Bullard, trustee, Monson State Hospital.
Thomas Russell, trustee, Worcester State Hospital.
Dr. Samuel B. Woodward, trustee, Worcester State Hospital.
Dr. Owen Copp, executive officer, State Board of Insanity.
Dr. Lowell F. Wentworth, deputy executive officer, State Board of Insanity.
Dr. D. H. Fuller, assistant to executive officer, State Board of Insanity.
Dr. Herbert B. Howard, chairman, State Board of Insanity.
Dr. Michael J. O'Meara, member, State Board of Insanity.
Mr. William F. Whittamore, member, State Board of Insanity.

The subject for discussion was: Vacations, sick leave, hours of duty and relief from duty of officers, nurses and others at the different institutions.

The views of the different speakers as expressed at this conference were as follows:—

Dr. Edward French, superintendent of Medfield Asylum:—
There seems to have been quite a change during the past five or six years in the way vacations have been regarded, both by officials and by subordinate employees in institutions. Up to that time the allowance of two weeks a year for every one seemed to be satisfactory and sufficient, but of late years I have had more requests for extensions of leave of absence, and in several conversations with officials they have expressed the opinion that two weeks at one time did not afford a sufficient amount of rest. Personally I believe that they are right, and that an officer who bears the daily responsibility and the ordinary grind of routine work should have leave of absence oftener

than once a year, and should also have more than two weeks during the year in the aggregate. Of course half days and days off occasionally happen, but as this leave of absence is usually for some special purpose the official does not get very much rest. I also believe that subordinate employees should have longer than two weeks during the year and that it should not be all at once, but that if possible it should occur at two or more times during the year. I can readily appreciate the irksomeness and the monotony of working in a ward with insane patients day after day, and think if a reasonable vacation could be granted to attendants and nurses, say twice or three times a year, they would have more interest in their work, would be less impatient, and many of the little difficulties which we now have to smooth out between patients and subordinates would be eliminated.

We have always conducted the matter of absences from duty, both in case of sickness and for vacations, on a strictly business basis. The subordinate who is sick loses his time. If he works overtime he is paid extra for it. I have also encouraged them to take a week extra on their annual vacation, allowing them two weeks' vacation with pay, after one year's service, and a third week with loss of pay. Attendants and nurses at Medfield are now working between sixty-eight and sixty-nine hours a week.

Officers have been given the same vacation. In addition to that they have been given one half day off each week and every other Sunday; also, special leaves of absence are granted to attend medical meetings or other occasions. This seems to be quite necessary in an institution situated, as Medfield is, away from any large center or any means of entertainment, and it is not uncommon for my assistant physicians or other officials in the administrative department to go to Boston to attend the theaters or other entertainments on occasional evenings.

It is hard to say what is the best standard, as it cannot well be absolutely the same in all institutions. There is mental comfort in system, and if all the institutions were exactly on the same basis no doubt it would be more comfortable for the superior officers, but this seems hardly possible. For instance, institutions like Gardner and Medfield must give officers and employees more time away as it takes several hours to reach a

store where anything can be bought, and the immediate vicinity after a time is exhausted of all means of entertainment. Still I think it is possible to have a general system and a common rule for leaves of absence and for sickness in all the State institutions, modifying these as circumstances demand. In talking with my older and more intelligent employees I find they prefer to have their time off all at once. They say they get very little satisfaction from having relief from duty two or three hours a day, and, for an example, would prefer one day and a half at a time off duty a week rather than three half days distributed throughout the week. This gives them an opportunity to go somewhere, and to get more rest and more enjoyment than is possible from a few hours' vacation often repeated.

The greatest difficulty that I have encountered has been in satisfying help employed in the domestic departments. Every one at Medfield is given at least one whole day off during the week, but even this does not seem to satisfy the domestic employees. Their wages are lower than those of nurses and attendants, and they seem more dependent upon entertainment and amusement than do the class of young people employed as nurses and attendants. Most of the domestics come from the city, and it has been impossible for me to obtain them elsewhere. They miss the city life greatly and stay but a short time, preferring to live upon their relatives or upon starvation wages in the city rather than have a larger wage and a more comfortable living in the isolation of Medfield.

Dr. John A. Houston, superintendent of Northampton Hospital: — I have not prepared any remarks for this meeting but will briefly give my views of the subjects under discussion and state what our custom with regard to them is at Northampton.

I suppose we all concede the need of vacations and their value to every one who is steadily and continuously employed at the same kind of work throughout the year.

If those who work at trades and professions, who go home at night leaving their work behind them, and those who can get away from their work from Saturday noon or Saturday night until Monday morning, need vacations, surely persons employed and living in institutions stand in greater need of a period of

change and rest. Their conditions of work and of living are more onerous, more irksome. They live at the scene of their work. Nurses live with their patients all day long. When they go from their work and to their meals they are with their fellow employees. They associate throughout the evening with the same ones they have been seeing all day. Next morning they see the same faces they saw the day before, and so on day after day; and so with every one who lives at the institution. When the officers' work is done, if it ever is done, they cannot get away from it and from their associates. The medical staff cannot be said to be ever free from duty except when away from the institution, because they are likely to be called at any hour, day or night. Surely these need a vacation.

As to whether two weeks is a long enough vacation, I think that two weeks is not long enough for the employees who are on duty a part of every day of the week. A longer one is advisable for both institution and employee. During the past few years it has been our custom to grant an extra week to the medical officers.

As for nurses and the domestic help, our experience confirms that of Dr. French, that they frequently ask for more than two weeks. It has been our custom to grant them this extra week without pay if we have help enough to spare them.

Very few of our nurses live near the hospital. A good many of them come from Vermont, New Hampshire and Maine, and some from the Provinces. It takes a day or more to go home and the same time to return, thus taking at least two days from the vacation. Living so far from home in most instances, they have not been home since the year previous, so that in most cases two weeks seems hardly long enough.

The question has arisen with us whether we should allow employees who are under the eight-hour law to have vacations. I think it would be for the benefit of the institution and fair to the employee that every one who works there week in and week out throughout the year should have a time for rest, as said at the beginning of my remarks, but it does not seem fair that an employee who gets through work Saturday noon and does not return to the institution till Monday morning, who has no

cares or responsibilities through the night, should have as long a vacation as nurses, for instance, should have.

Since the law went into effect putting laborers on an eight-hour basis, we have allowed them a vacation without pay.

Dr. Howard:— These are the eight-hour men?

Dr. Houston:— Yes. I am inclined to believe it would be desirable to give them also a vacation with pay.

Dr. Howard:— Do they take it [vacation without pay]?

Dr. Houston:— Most of them do, a few do not. Some of the nurses whose homes are in the old country have recently asked if they could work at the institution and receive pay for the two weeks of vacation allowed them. I have not given a definite reply to that request. I have felt that it was desirable for them to take their vacation. It is given to them partly that their services may be more valuable when they return to the hospital.

About sick leave,— our custom is to decide each case on its merits. If an employee who has been at the hospital but a short time is taken sick, we care for him but deduct from his pay for the time he is off duty. If an old employee is taken sick for a few days we are inclined not to deduct pay for lost time. I think an old employee should be granted a certain amount of sick time, but this is liable to lead to abuse. We cannot reckon in dollars and cents the value of a nurse's time. One nurse who may be sick for a day or two now and then may be worth a good deal more to the hospital than some other nurse who has not lost any time because of illness. So that, as said before, each case must be decided on its merits. The heads of departments keep account of all time lost because of illness, and this is handed in to the office when each pay roll is made up.

I doubt if a general standard could be made that would apply well at all institutions. We live in a comparatively small community. Our employees usually go to town for their regular outings unless it is for a day or more, when they may go to Springfield or farther.

I do not approve of giving a day or two days a month in place of the annual vacation. It upsets the service. Nurses

off duty for a day or two at a time do not get the continuous rest secured by a longer vacation, while the expense to the nurse of repeated outings of a day or two is greater than the expense of an extended vacation.

Dr. Copp:— You were to discuss the daily hours.

Dr. Houston:— We try to plan the hours of the nurses on duty as near seventy for the week as possible. I think sixty hours is desirable. We had hoped this year to reduce the number of hours per week to sixty, but we have never been able to do this because of the difficulty of getting enough nurses.

Our domestic help work about sixty hours per week. They have an afternoon and evening each week and a part of each Sunday, either morning or evening.

Dr. Howard:— Do you give a day off each week?

Dr. Houston:— We give an afternoon and an evening off each week and a part of Sunday.

Dr. Copp:— What proportion of your nurses do you allow off at any one time?

Dr. Houston:— That is left with the superintendent of nurses.

Dr. Copp:— Do you have as many as a half of your nurses off at any one time?

Dr. Houston:— Not as a rule. Sometimes a third; on holidays we allow a half day in addition to their regular vacation, but it frequently happens that we cannot accommodate them all on the same day, in which case those who have to stay to do the work are given the same amount of time later, when they choose to take it, when they can be spared.

Dr. Copp:— Do you approve of giving a full day off and confining the work to six days a week, or distributing it over seven days?

Dr. Houston:— I should prefer to confine the work to six days a week, if possible, but we have never been able to do that.

Dr. Howard:— If you had enough employees?

Dr. Houston:— If we had enough employees I should make it six days a week.

Dr. Charles E. Thompson. superintendent Gardner Col-

only: — I have not prepared any remarks on this subject, but it seems to me to open one of the most important matters we have to deal with. The care and treatment of the patients is pretty well looked after in each institution. Almost as important as that, it seems to me, is the treatment of our employees. Isolated as we are at Gardner, three miles from any town, we early found out that consideration of employees was one of the very important things to be considered. We have conformed to the eight-hour law, inasmuch as the firemen, engineers, carpenters, painters, etc., are on eight-hour time six days a week. They are allowed a vacation without pay. Our nurses are now working an average of seventy, and as high as seventy-seven, hours a week of seven days. Their time off is one hour each afternoon, every other evening, an afternoon one week and Saturday afternoon and evening every other week, which is quite satisfactory to them. I have very little complaint about their time off. They have two weeks at the end of the year, and in quite a few instances have asked for one or two additional weeks, to go to their homes in Maine, the Provinces, etc., which they have had without pay. Almost every other day an employee asks me for a day off, or for an extra half day, and I always grant it, so that each employee probably gets a day off additional about once in three weeks. That seems to them quite satisfactory. Our people cannot go away, except to Gardner, three miles off, so that, in the last three years, we have provided a recreation room and smoking room, and in addition once each month we provide for a social, which we encourage them to get up themselves. At these socials they have card playing, games, dancing, and we provide ice cream, cake, coffee, cocoa, or whatever they want, and this has done a great deal to encourage good feeling among our employees. After such an entertainment the feeling is entirely different between the officers and subordinates.

Occasionally an officer has said. "It seems as if we work longer hours than some of the other institutions. They are working ten hours a day and have one day off each week." Other officers have applied to them, informing them that if they

work ten hours they are tied right down to that ten hours and do not have the leeway that they have with us. We have got to show our officers a great deal of consideration.

The officers, if they are sick at the institution, are allowed to continue on the pay roll for two weeks. Some of our old officers, who have been with us for several years, we have kept on the pay roll for even four weeks, and in one case six weeks, and it more than paid, because the other officers have felt since that if they are sick they will be properly taken care of. The eight-hour people are taken care of at the hospital, and their positions are kept open for them, but they are not paid for their time.

Dr. Copp:—Do they actually take vacation, these eight-hour men?

Dr. Thompson:—Yes. It seems to me that there should be a standard for all institutions, but manifestly it must be general. It cannot apply to an institution near the city and at the same time to one in the country, as we are.

Dr. Herbert B. Howard, chairman, State Board of Insanity:—It seems to me that the subject of hours off and pay for service is much more in the minds of the employees and nurses than it was fifteen or twenty years ago. However, we who have run institutions know that we still have lots of people in our employ by whom that side of the question seems never to be considered. The matter of being efficient in service, of doing the work satisfactorily, does seem to be uppermost with quite a percentage of the nurses and employees. I think that the people, on the average, throughout the State, after they have been in the State service for four or five years, know, by some method, which institution pays the most and at which place the attendant has the most liberty. I have some evidence of that.

Dr. George S. Adams, superintendent of Westborough Hospital:—I would like to tell the people present the conditions we have at Westborough. We give all employees, except the eight-hour men, a vacation of two weeks after one year's service, or one week after six months' service. Nine-tenths of those who take vacations ask for an extra week, some for two weeks.

and when we are situated so we can give it, we always do so. They have the two weeks with wages and for the additional time get no pay. The eight-hour men work only six days, and since we have been under the eight-hour law I have not had a request from any engineer or fireman for a vacation. In the laundry and sewing room the employees are also under the eight-hour law, and the first year after they began we had a request from some of the employees for leave of absence of one or two weeks. During the past summer there has not been an application for a leave of absence.

The hours of duty for the nurses and attendants are sixty per week,—an average of ten hours a day with one day in seven off duty, and when they have vacation, they can have their day for the week at that time.

The physicians have two weeks' vacation and they ask for a leave of absence of one week in addition, which we have granted.

I cannot say what is the best standard or whether there should be a different standard for the employees in each institution. The Westborough Hospital is within easy reach by trolley of Worcester, Westborough and Marlborough, and they are able to go away on their days off very conveniently.

Dr. Copp:—You are on the sixty-hour basis, with one day off in seven?

Dr. Adams:—Yes.

Dr. Copp:—Do you have any difficulty in getting nurses?

Dr. Adams:—No. Ever since we put them on the sixty hour a week time we have secured help more easily.

Dr. Copp:—Is the quality of your nurses better?

Dr. Adams:—We have a larger portion of them who have a high school education. Besides, we have increased the wages for attendants to \$25 and \$30 per month and for nurses \$20 to \$25 per month. Occasionally I have an application for a position from some one who has worked in another institution, and of course I ask why he or she left, and often their reply is "left on account of long hours," so I think it helps in securing more satisfactory nurses and attendants to have a ten-hour day six days in the week.

Dr. Copp: — Do you expect your nurses during the ten hours to keep actively at work, or do you give them rest periods, such as they had under the old law?

Dr. Adams: — They are expected to be on duty; after the morning work is done up they are not as actively employed. They take patients out to walk and do various other things in the interest of the patients,—some wards requiring constant attention, others requiring little of the nurses; but they all take their turns on the difficult wards, and also have an opportunity to study their lessons for the training school during work hours.

Edmund A. Whitman, Esq., chairman, trustees of Gardner Colony: — Perhaps I approach this general subject with a little prejudice, because, when the bills were first presented to the Legislature limiting the hours of State employees they were broad enough to cover the attendants in the hospitals. I was present at this hearing, representing clients who were opposed to the demands of the labor unions, so that my duties there were to oppose the shortening of hours. My prejudice was that uniform rates should prevail, and that there was no reason why the State should give any shorter hours than any other employer. My experience with an institution, however, has modified these ideas. I think that the problem is substantially different with each institution, depending on the character of the patients. If you are running a storage plant, where the patients are simply to be shut up and humanely treated, it perhaps does not require a very high order of intelligence to take care of them, and the problem of changing help is simply the trouble to the superintendent of getting a new man to replace an old one. But when you get into a different condition, as we are trying to at the State Colony, of having the patients do some useful work, you are then combining with the attendant who is a mere custodian an attendant who must have some skill in directing the energies of patients, and that means a higher class of employees. Such people cannot be induced to stay for any length of time with the existing hours and wages. It seems to me that it is economy on the part of the State to make such hours and such wages as will secure the service which is necessary for the situation. So, in our institution, we are very much in favor of such appro-

priations as will enable us to reduce the hours for attendants to 10, and even less in some cases, and to give such remuneration as will secure a continuous service. The figures in the last few years indicate that there has been a constant change of employees. We need homelike conditions for the employees and we need reasonable hours and reasonable pay, and I am convinced that the State will never be successful in its activities in institutions until we have gotten legislation, or appropriations from the Legislature, sufficient for that purpose.

Dr. Owen Copp, executive officer, State Board of Insanity:— This is one phase of our most important problem — the procuring and keeping an efficient and stable corps of workers. The complaint is quite general, not only that the right quality of person is difficult to find, but also that a sufficiency in number of any kind is often lacking. Last year there was a deficiency in nurses amounting to 7.7 per cent. on the average for all the institutions. The instability of the service appears in the fact that a male nurse averages to hold his place about four months and a female nurse less than six months.

The handicap is just as serious in this work as it would be for any business which would be likely to go into bankruptcy under such conditions. It would seem to be imperative that our hospital service be made more attractive by shortening hours of continuous duty, by suitable daily and weekly relief, by reasonable vacations and improved conditions of living.

Dr. Ernest V. Scribner, superintendent of Worcester Asylum:— For some little time (I think this is the second year now) the institution with which I am connected has granted to its employees a service of sixty hours per week, with one day off in seven, and the institution has benefited by it very much. I think the officials have, too. Thus far it has not had very much effect on the rotation in service of the persons whom we employ, but, with other changes and betterments in the service, has resulted in our getting people of better capacity, so that we do not have as many of the petty annoyances, troubles and trials that we used to have. There is a great deal less friction. We no longer have the attempts at strikes.

In regard to vacations, it seems to me that it would not be

possible to have any definite arrangement that would hold good for every institution. I do believe that we should keep as nearly as possible to some broad plan. Institutions are so influenced by environment, as Dr. French has said, and Dr. Thompson, that it does not seem to me that theirs can be compared exactly with an institution that is closer in touch with the larger centers of population and places of amusement. Now, Worcester Asylum is right in town. It also has a colony which is eight miles out, but, strange to say, there is not very much difference in the difficulty we have with the employees in the two places. The colony, however, is very near to the Boston & Albany railroad, so that people can utilize their time off to very good advantage. I am in favor of greater allowances in the way of vacations. When we changed our hours of duty for the nurses to sixty hours per week, with one day off in seven, the whole yearly compensation of each person was divided by fifty, so that each person received in the succeeding fifty weeks what he would formerly have received in fifty-two weeks. Now that gives them the opportunity to take their vacation, without pay, if they choose, and still be on the same basis as regards compensation as they were before. For a while they remembered it, but I think the majority of them have forgotten it now. We do not allow a vacation with pay to people who are on an hourly basis, either eight-hour or sixty-hour per week basis. If the other institutions were to adopt a uniform practice of allowing two weeks' vacation to the people who are on a sixty-hour basis, I am sure I should not oppose it in any way.

Dr. Copp:—Why do you take away vacation from the person who is working sixty hours per week?

Dr. Scribner:—I do not think that we have taken it away. We pay them for fifty weeks what was formerly paid in fifty-two.

Dr. Howard:—You allow them to work through the year without taking time off?

Dr. Scribner:—If they wish to take a vacation they are allowed to take a vacation without pay, and, as I say, we had a feeling that we were allowing them for their vacation.

Dr. Copp: — Don't you think that you should not only permit but really encourage everybody to take a vacation?

Dr. Scribner: — I do. I believe in it.

Dr. Howard: — Don't you think that that electric line that runs right through (Air Line) by the colony might have something to do with making people willing to stay in your colony? They can go to Westborough or Worcester by that line.

Dr. Scribner: — I think so; but I am not sure that if you were to put that to test, by comparing Grafton with Gardner, you would not find our rotation as great or greater than at Gardner. I doubt whether they stay better with us than at Gardner.

Dr. Copp: — In your institution, do you find a large proportion of those who leave are those whom you would like to keep?

Dr. Scribner: — I do not remember well enough to answer that definitely, but I should think the proportion of those whom we would care to keep is very small among those who leave.

The greatest trouble with the men is intemperance. There are more discharged for that than for any other reason.

One other word with reference to time off because of illness. For a long time, in my early institutional experience, we had no particular rule, and each case was treated on its merits. The rule practically amounted to this: if a person was not confined to bed too long, his wages were paid. But we found that this happened,—people imposed upon us, and took sick leave instead of vacation, and spent part of the time in bed. This was particularly true of young women who did not feel very well and thought they would like to rest, and so they were “indisposed” for a week or ten days. The next thing we tried was allowing three days each month for illness, with pay. It was surprising to find the number of cases of illness that would extend over just three days. Employees would ask, “How much time is allowed for illness?” They were told “three days.” We soon found that those who made that inquiry took that time every month, as though it was time that belonged to them. Therefore no time is allowed off now for illness on account of

any person who works on an hourly basis. To the heads of departments and to the people who are not on any definite hourly basis the old rule holds; each case is treated on its own merits.

Dr. Copp:—Do you think there is more dissatisfaction on a definite basis of that sort than there is in the looser method of giving everybody what he wants?

Dr. Scribner:—I think there is more satisfaction.

Dr. Copp:—Do you have many complaints?

Dr. Scribner:—I do not know that I have had any.

Dr. Copp:—I think there is one thing to be thought of there. Nurses and employees have a sense of being nagged by having every little loss of time taken account of. Now if you should strike a happy medium of having definite limits, and not taking notice of every little thing, I think it would be more satisfactory.

Dr. Scribner:—I think that our change from seventy or more hours to sixty has been of benefit to my institution.

Dr. Copp:—But, on the whole, doctor, you are making progress in regard to changes and quality of nurses?

Dr. Scribner:—I believe that we are. When I point to the numbers of rotations I cannot say very much, but I do think that the general service we are getting is much better. I have no difficulty whatever in getting all the employees I desire. In the case of the nurses, every woman who comes to our institution as a nurse must be a member of the training school.

Dr. Howard:—It seems to me it really means different needs in each institution.

Dr. H. W. Mitchell, superintendent of Danvers Hospital:—Until there is uniformity among the hospitals in the number of hours of daily employment there can be no logical rule in granting sick time and vacation leave. It might be questionable to grant time in the case of a nurse who worked sixty hours a week in one hospital, but quite reasonable for one who was employed over eighty-four.

I do not know how the hours of service are computed at other hospitals, but the following conditions prevail at Dan-

vers: nurses have one day in seven off duty, and have two hours every other Sunday. On six days of the week they begin work at 6 A.M. and are uninterruptedly on duty until 8 P.M., with the exception of one day per week, when their work ends at 6 P.M. In addition to this service they have to attend entertainments and do some relief work from 8 P.M. to 10 P.M. The male attendants have the same hours. No allowance of time for meals is given, and it is certain that our nurses are on duty over eighty-four hours per week. It is impossible to make a lower computation unless the vacation and sick time be taken out to make a general weekly average for the entire year.

For many years it has been customary to allow two weeks sick time annually, if required by reason of illness. In special instances pay has been given for longer periods. It seems obvious that if a nurse should contract typhoid fever, for example, in the performance of her duties, she should be entitled to a consideration from the hospital not due one who was sick from causes existing prior to employment.

Since the eight-hour law went into effect no allowance for sickness or vacations has been granted those working under its provisions. The farm hands work nine hours and receive annual vacations. All the staff officers are allowed two weeks' annual vacation. I think it has been customary to grant extended leave of absence without pay, when desired.

Regarding the character of our employees and the difficulty of keeping the best in continuous service, I wish to say that it is unreasonable to expect that the best will give their lives to the hard work of living with the insane unless the inducement and compensation to remain are similar to those obtainable elsewhere by the same persons. I have in mind many excellent young men and women, formerly in the service of the Danvers Hospital, now employed in hospitals, prisons or other institutions where the compensation is larger and living conveniences more comfortable. I believe most of them would gladly have remained at Danvers if the reward for their service had been proportionate to its value to the hospital.

I believe that the only solution of the trouble that insane hospitals have in maintaining proper service on the worst wards,

especially, lies in selecting from our force the most promising men and women, and inducing a sufficient number of them to remain, take charge of the wards, and help, by precept and example, in training the novices to demonstrate their value. It is folly to expect the most desirable to remain indefinitely while the men receive the wage of farm hands and the women that of nurse girls. A goodly percentage of well-tried and permanent head nurses and attendants will steady the beginners and ensure better service than can be secured with a transient force, only a few of whom are kept from six months to two years. Under better conditions, many of our most desirable men would marry and remain permanently in the service.

Dr. Copp:—Do you get nurses enough?

Dr. Mitchell:—We have great difficulty in maintaining the desired number, and in the summer season we often have to resort to the employment agencies, where we meet the representatives of other State hospitals on the same errand, and are satisfied if we can get candidates for work who can carry keys and count as one more employee.

Dr. Copp:—Do you think higher wages under the present conditions would keep them in the hospital?

Dr. Mitchell:—I think that with reasonable hours of service, and with the wages paid to prison guards, we should be able to keep the desirable men, with few exceptions.

Dr. Copp:—In the prison they live outside. They have a chance to have their families. Would you regard that a factor?

Dr. Mitchell:—Most certainly. Some ten years ago, when I recommended that two of our male nurses, who were married and had children, be allowed to live with their families in cottages which they secured near the hospital, I had to beg for the privilege, which was allowed only as a personal favor, and was told that it would not work out well. Those men have remained continuously in the service, and are to-day considered two of our most efficient and trusted employees. I believe it would be a wise and economical measure for the State to own and rent small tenements for this purpose.

Dr. Houston: — Are the nurses on duty at meal times? At Northampton they are away from the patients at meal times.

Dr. Mitchell: — I wish we might accomplish that at Danvers, but with our present arrangements and ratio of nurses to patients it is impossible. At present the nurses who attend the congregate diningrooms serve the first course and then go to their tables, eating with the patients and being responsible for them during the meal time. In the few small ward diningrooms the attendants and nurses eat simultaneously, and at no time are the nurses free from the responsibility incident to their work. It is a very poor arrangement, but cannot be corrected until we have many more nurses.

Dr. Henry P. Frost, superintendent of Boston Hospital: — I believe that some definite rule would be an aid to the trustees of Boston State Hospital. All of our attendants and nurses, and the majority of our other employees, work sixty hours per week of six days. They have one full day off each week. Every employee, except in the engineer's department, whether he works eight hours or ten a day, gets two weeks' vacation during the year, and all get two weeks' sick time if they are sick that much. It has been of great advantage to me to learn that that is far more liberal an arrangement in regard to sick time and vacations for the eight-hour employees than prevails at the other institutions. It gives me a basis upon which to suggest a modification of our rule.

Dr. Howard: — How would it work to give them a maximum of four weeks if they have not had any sick time? Do you think that would keep them well during the year?

Dr. Frost: — I think it would be an excessive allowance. It is a question whether we should be so free with the pay roll.

With reference to the higher officers, I do not believe in too rigid a rule. I served for a number of years as assistant, and my experience is that it is better not to have too strict a rule for time off duty for the higher officers. If they require to be regulated in that way, it is hardly worth while to keep them in the service. What I approve of is to begin with two weeks' vacation in the year and after several years of service increase

this to three weeks. After a number of years of service an assistant ought to have a full month.

The schedule which we have in operation for attendants and nurses is sixty hours per week, and we are having no difficulty in maintaining that schedule, and less difficulty than heretofore in getting employees.

Dr. Copp:—Are you more successful at your men's department in getting men?

Dr. Frost:—Yes, we are, just at this season, but whether we will have the same difficulties next spring and summer I do not know. We are certainly able to keep our employees longer, and do not lose so many of the men whom we would like to keep.

I think we should be careful not to employ those who run about from one hospital to another.

As to the best standard, I think a great deal depends on the conditions in which your employees live. If you can furnish good, comfortable quarters for them, with complete relief from contact with patients, that is of the greatest value. I certainly think they should be free from service at the patients' tables while taking their own meals. That is arranged in our institution with some difficulty by having the attendants eat in two divisions, both divisions at a time when the patients are not eating, first an attendants' meal, than a patients' meal, etc.

I think the standard should be pretty nearly uniform in all the institutions. We should have a general rule as to vacations, sick leave, hours of duty, time off duty, etc., modified, in some details, according to the local situation. I worked for a good many years with such a system, which had been worked out in conference like this, and it proved to be very satisfactory.

Dr. John H. Nichols, superintendent of State Infirmaries:—It seems to me that if we were to favor any one class of employees over another in the matter of granting more liberal hours or a more liberal amount of time off duty, such consideration ought to be offered to those of our officers who are in direct contact with our patients on the ward, *i.e.*, it should be something that should lean toward the favoring of the nurses and attendants.

In regard to the matter of sick leave, it seems to me that time off duty allowed for sickness is something that is hard to arrange, except on the merits of the individual cases. We may have a general rule, but we will have to very frequently break away from that rule. I think that we ought not to look at the matter of sickness wholly from a commercial standpoint. Our institutions are all hospitals, and we all have training schools for nurses, and we are teaching these nurses to be very humane and considerate toward all of our patients when they are sick. In accordance with our teaching, it seems to me that we should, therefore, be very liberal and very humane to our nurses when they are sick, even though they have not contracted some contagious disease on our wards. There are many of them who become worn out. There are doubtless a great many who get tired out and used up in our service. They become anæmic, etc., and it sometimes requires more than two weeks to get back on duty in good shape. I think it is very much to our advantage that they should be in good shape when they do get back, and I believe that occasionally we should make rather liberal interpretation of any rule regarding sick leave. We do want to show our nurses and attendants and all of our employees reasonable consideration in regard to this matter of time off. This is one effective way of improving our service. There is no question but that, regardless of the expense which we have incurred, the service of firemen and engineers has very much improved under the conditions that exist to-day. We are not having the changes in our engineer's department and in our fireman's department. These men stay with us year after year now. I am sure that it has been in many ways a good thing, and the sooner we get to that standard with our other employees I think the better our service will be.

NEW LEGISLATION.

The following acts and resolves relative to the institutions and persons under the supervision of the Board were passed by the Legislature of 1910:—

Chapter 345. An Act relative to the removal of insane prisoners from the Massachusetts Reformatory and the Reformatory Prison for Women.

This act gives authority to the central district court of Middlesex to commit insane prisoners in the Massachusetts Reformatory; and to the first southern district court of Middlesex to commit insane prisoners in the Reformatory Prison for Women.

Chapter 414. An Act relative to making goods for the use of public institutions by the labor of prisoners.

Section 1 provides for annual meetings in October of the superintendents of institutions for the insane, the superintendents of other charitable institutions and the officers in charge of penal and reformatory institutions, for the purpose of determining the styles, designs and qualities of articles and materials to be made by the labor of prisoners for use in the public institutions. The officers elected at this meeting must notify the Prison Commissioners of the styles, designs and qualities adopted by the meeting within a week. The expenses are provided for.

Section 2 provides for the issuing in November of lists of styles, designs, etc., by the Prison Commissioners, and requisitions must conform to such descriptive list. It also provides for the settling of differences by arbitrators.

Section 3 provides for the time and manner of making requisitions.

Section 4 relates to prices.

Section 5 forbids the State Auditor to allow or pay for any articles for use in public institutions, and which are on the descriptive lists, unless made in a prison or other institution, without the certificate from the Prison Commissioners that the goods cannot be supplied from the prisons.

Chapter 307. An Act relative to persons suffering from certain mental disorders who are arrested or confined in the city of Boston.

This act prohibits persons suffering from mental disease, who come under the care or protection of the police of Boston, from being held in the city prison or other place where criminals are confined, and provides temporarily for their reception at the Boston State Hospital until the new Psychopathic Hospi-

tal is ready for use. Cases of delirium tremens are not included in this class.

Chapter 420. An Act relative to the commitment of the insane and allied classes.

This is a revision of section 49, chapter 504 of the Acts of 1909, and provides for the payment of the expenses of commitments and examinations therefor.

Chapter 122. An Act relative to the commitment of the insane.

This act is an amendment of section 106, chapter 504 of the Acts of 1909, and provides for the commitment of prisoners under sentence in a jail, house of correction or prison other than those mentioned in section 105.

Chapter 452. An Act relative to the recommendations for legislation in the annual reports of State boards and commissions.

This is an amendment of section 6, chapter 18 of the Revised Laws.

Chapter 220. An Act to provide for supervision by the Governor and Council of expenditures and other financial operations of the Commonwealth.

This act requires the heads of departments to file with the State Auditor on or before the fifteenth day of November statements showing the appropriations for the current year and requirements for the ensuing year, with certain comparative statements and other data, both for current expenses and for special objects; and requires the Auditor to submit such statements to the Governor and Council on or before the first Thursday in January; and the Governor shall transmit the same, with his recommendations, to the General Court.

Chapter 268. An Act to provide for the annual preparation and printing of lists of State officials and employees with their salaries or compensation.

Chapter 74. Resolve relative to a State hospital for cases of nervous breakdown.

This act provides for the appointment of a commission of five persons to determine whether it is expedient and practicable to

establish and maintain a State hospital or sanatorium for the cure of cases of nervous breakdown, and for patients who are suffering from nervous or mental breakdown not amounting to insanity.

Chapter 39. Resolve to provide for additional copies of the report of the trustees of the Gardner State Colony for the year nineteen hundred and nine.

Chapter 635. An Act to provide for the purchase of a site for the construction of a new hospital for dipsomaniacs.

Chapter 583. An Act to authorize the State Board of Insanity to hold property in trust for the use of the insane and other classes under its supervision.

Chapter 59. Resolve to provide for an investigation of the increase of criminals, mental defectives, epileptics and degenerates.

Chapter 428. An Act to restrict the use of common drinking cups.

Chapter 607. An Act to provide for reimbursing cities and towns for loss of taxes on land used for public institutions.

SPECIAL APPROPRIATIONS.

The special appropriations for the year 1910 and for two, ten and twelve year periods are shown in the following tables:—

Detailed Statement.

	1910.	Two Years, ending 1910.	Ten Years, ending 1908.	Twelve Years, ending 1910.
Worcester Hospital:—				
Constructing a sewerage system and connecting the same with the sewerage system of the city of Worcester, . . . [Acts, chapter 655.]	\$4,000 00			
Total,	\$4,000 00	\$4,000 00	\$299,098 44	\$303,098 44
Taunton Hospital:—				
Completing the sewerage system, . . .	\$5,000 00			
Constructing a cow barn at the Raynham Colony, [Resolves, chapter 114.]	4,000 00			
Constructing, furnishing and equipping two additions to the main hospital building sufficient to accommodate 80 patients, in addition to congregate dining rooms and the necessary connections with water, sewer and heating mains, [Resolves, chapter 156.]	68,500 00			
Total,	\$77,500 00	\$84,300 00	\$325,205 00	\$409,505 00

Detailed Statement — Continued.

	1910.	Two Years, ending 1910.	Ten Years, ending 1908.	Twelve Years, ending 1910.
Northampton Hospital,	-	-	\$217,300 00	\$217,300 00
Danvers Hospital: —				
Reconstructing and enlarging the laundry building,	\$11,000 00			
[Resolves, chapter 127.]				
Total,	\$11,000 00	\$11,000 00	\$364,100 00	\$375,100 00
Westborough Hospital: —				
Constructing and furnishing a sanatorium for 40 tuberculous women patients,	\$6,000 00			
Constructing a sewage reservoir and connecting it with the present sewerage system, providing a suitable covering therefor and necessary apparatus for pumping sewage,	4,000 00			
[Resolves, chapter 131.]				
Constructing, furnishing and equipping a colony group of three one-story buildings of wood sufficient to accommodate 100 women patients and 18 nurses and employees, and to provide a kitchen, dining rooms and local heating plant,	57,000 00			
[Resolves, chapter 152.]				
Total,	\$67,000 00	\$131,600 00	\$454,625 00	\$586,225 00
Boston Hospital: —				
Constructing and furnishing complete infirmary buildings sufficient for 300 patients and the necessary officers and nurses,	\$275,000 00			
Constructing and equipping an extension to the present laundry, and for carpenter and machine shops and industrial rooms for patients,	44,000 00			
Constructing and furnishing an addition to the Butler building to provide treatment rooms for acute and curable patients,	39,000 00			
[Acts, chapter 644.]				
Total,	\$358,000 00	\$958,000 00	-	\$958,000 00
Worcester Asylum: —				
Purchasing and installing a new boiler at the Grafton Colony,	\$2,000 00			
[Resolves, chapter 78.]				
Additions to and alterations of existing buildings at the Grafton Colony, to provide a kitchen, dining room and sleeping rooms for employees,	9,700 00			
[Resolves, chapter 125.]				
Constructing, furnishing and equipping two one-story wooden buildings to hold 50 patients each,	40,000 00			
[Resolves, chapter 155.]				
Total,	\$51,700 00	\$127,700 00	\$517,900 00	\$645,600 00
Medfield Asylum: —				
Improving the water supply by constructing and connecting new wells with the present water supply system,	\$4,500 00			
[Resolves, chapter 129.]				
Constructing and equipping a laundry,	37,000 00			
[Resolves, chapter 151.]				
Total,	\$41,500 00	\$55,500 00	\$558,700 00	\$614,200 00
Gardner Colony: —				
Constructing and furnishing a house for employees,	\$5,000 00			
Constructing and furnishing a building for female patients,	10,000 00			
Alterations in storehouse,	1,000 00			
[Resolves, chapter 75.]				
Total,	\$16,000 00	\$43,350 00	\$495,950 00	\$539,300 00

Detailed Statement — Concluded.

	1910.	Two Years, ending 1910.	Ten Years, ending 1908.	Twelve Years, ending 1910.
Bridgewater Hospital,	-	\$90,000 00	\$235,000 00	\$325,000 00
State Infirmary,	-	-	\$120,000 00	\$120,000 00
Monson Hospital: —				
Extension of sewerage system,	\$6,000 00			
Purchase of land,	740 00			
Constructing and furnishing a house for employees,	2,000 00			
[Resolves, chapter 119.]				
Total,	\$8,740 00	\$131,740 00	\$431,800 00	\$563,540 00
Massachusetts School for Feeble-minded, .	-	\$11,500 00	\$537,100 00	\$548,600 00
Wrentham School: —				
Constructing a cow stable, hay barn and silo,	\$4,000 00			
Extending the electric lighting to the farm buildings,	1,000 00			
[Resolves, chapter 80.]				
Constructing and furnishing a building for 130 custodial patients,	65,000 00			
Constructing and furnishing a house for employees,	11,500 00			
[Resolves, chapter 149.]				
Total,	\$81,500 00	\$107,700 00	\$247,800 00	\$355,500 00
Foxborough Hospital,	-	\$5,000 00	\$173,150 00	\$178,150 00
Purchase of the Boston Insane Hospital, .	-	\$1,000,000 00		\$1,000,000 00

Summary of Special Appropriations.

	1910.	Two Years, ending 1910.	Ten Years, ending 1908.	Twelve Years, ending 1910.
Insane: —				
Constructing, furnishing and equipping buildings for patients and nurses, . .	\$490,500 00	\$937,300 00	\$2,207,525 00	\$3,144,825 00
Number of patients provided for, . .	672	988	2,992	3,980
Average per capita cost,	\$656 57	\$838 07	\$596 27	\$656 29
Number of nurses provided for, . .	60	110	651	761
Average per capita cost,	\$821 43	\$993 51	\$650 49	\$700 08
Patients and nurses provided for, . .	732	1,098	3,643	4,741
Average per capita cost,	\$670 08	\$853 64	\$605 96	\$663 32
Land, buildings for officers and em- ployees and for administrative pur- poses, including furnishing and equip- ment, improvements and repairs, . .	\$140,570 00	\$572,520 00	\$1,733,886 44	\$2,306,406 44
Total,	\$631,070 00	\$1,509,820 00	\$3,941,411 44	\$5,451,231 44
Feeble-minded: —				
Constructing, furnishing and equipping buildings for patients and nurses, . .	\$65,000 00	\$71,000 00	\$425,500 00	\$496,500 00
Number of patients provided for, . .	130	180	840	1,020
Average per capita cost,	\$500 00	\$394 44	\$435 12	\$497 24
Number of nurses provided for, . .	-	-	82	82
Average per capita cost,	-	-	\$731 70	\$731 70
Patients and nurses provided for, . .	130	180	922	1,102
Average per capita cost,	\$500 00	\$394 44	\$461 50	\$450 54
Land, buildings for officers and em- ployees and for administrative pur- poses, including furnishing and equip- ment, improvements and repairs, . .	\$16,500 00	\$48,200 00	\$359,400 00	\$407,600 00
Total,	\$81,500 00	\$119,200 00	\$784,900 00	\$904,100 00

Summary of Special Appropriations — Concluded.

	1910.	Two Years, ending 1910.	Ten Years, ending 1908.	Twelve Years, ending 1910.
Epileptic: —				
Constructing, furnishing and equipping buildings for patients and nurses, . .	—	\$84,000 00	\$152,550 00	\$236,550 00
Number of patients provided for, . .	—	150	192	342
Average per capita cost,	—	\$560 00	\$722 03	\$656 57
Number of nurses provided for, . .	—	—	27	27
Average per capita cost,	—	—	\$444 44	\$444 44
Patients and nurses provided for, . .	—	150	219	369
Average per capita cost,	—	\$560 00	\$696 57	\$641 05
Land, buildings for officers and employ- ees and for administrative purposes, including furnishing and equipment, improvements and repairs,	\$4,370 00	\$43,370 00	\$63,350 00	\$106,720 00
Total,	\$4,370 00	\$127,370 00	\$215,900 00	\$343,270 00
Inebriate: —				
Land, buildings for officers and employ- ees and for administrative purposes, including furnishing and equipment, improvements and repairs,	—	\$5,000 00	\$35,517 00	\$40,517 00
All classes: —				
Constructing, furnishing and equipping buildings for patients and nurses, . .	\$555,500 00	\$1,092,300 00	\$2,785,575 00	\$3,877,875 00
Number of patients provided for, . .	802	1,318	4,024	5,342
Average per capita cost,	\$631 19	\$745 84	\$569 11	\$612 71
Number of nurses provided for, . .	60	110	760	870
Average per capita cost,	\$821 43	\$993 51	\$651 94	\$695 12
Patients and nurses provided for, . .	862	1,428	4,784	6,212
Average per capita cost,	\$644 43	\$764 91	\$582 27	\$624 25
Land, buildings for officers and employ- ees and for administrative purposes, including furnishing and equipment, improvements and repairs,	\$161,440 00	\$669,090 00	\$2,192,153 44	\$2,861,243 44
Total,	\$716,940 00	\$1,761,390 00	\$4,977,728 44	\$6,739,118 44
Average amount appropriated annually, .	—	\$880,695 00	\$497,772 84	\$561,593 20
Purchase of the Boston Insane Hospital, .	—	\$1,000,000 00	—	\$1,000,000 00
Total,	\$716,940 00	\$2,761,390 00	\$4,977,728 44	\$7,739,118 44

MEMBERS OF THE STATE BOARD OF INSANITY.

Date of Original Appointment.	Name.	Residence.	Term expires.	RETIRED.	
				Date.	Reason.
September, 1898	George F. Jelly, M.D.,	Boston,	September, 1913	-	-
September, 1898,	<i>Herbert B. Howard, M.D.,</i>	Boston,	-	January, 1902	Resigned.
September, 1898,	<i>Charles R. Codman,</i>	Barnstable,	-	September, 1906	Term expired.
September, 1898,	<i>Edward S. Bradford,</i>	Springfield,	-	February, 1900	Resigned.
September, 1898,	<i>Francis B. Gardner,</i>	Brookton,	-	February, 1902	Resigned.
February, 1900,	<i>Albert L. Harwood,</i>	Newton Center,	-	September, 1905	Term expired.
January, 1902, .	<i>James B. Ager, M.D.,</i>	Boston,	-	September, 1907	Term expired.
December, 1902,	<i>Seward W. Jones,</i>	Newton Highlands,	-	December, 1906	Resigned.
September, 1905,	Michael J. O'Meara, M.D.,	Worcester,	October, 1915	-	-
October, 1906, .	Henry P. Field,	Northampton,	September, 1911	-	-
January, 1907, .	William F. Whittemore,	Boston,	September, 1914	-	-
September, 1907,	Herbert B. Howard, M.D., ¹	Boston,	September, 1912	-	-

¹ Reappointed September, 1907.

DIRECTORY OF INSTITUTIONS.

PUBLIC.

WORCESTER STATE HOSPITAL (opened 1833):—

Trustees: Dr. Samuel B. Woodward, Worcester, chairman; Thomas Russell, Boston, secretary; Mrs. Carrie B. Harrington, Worcester; Miss Frances M. Lincoln, Worcester; George F. Blake, Worcester; Lyman A. Ely, Worcester; T. Hovey Gage, Worcester.

Regular meeting, first Tuesday of each month.

Superintendent, Hosea M. Quinby, M.D.

First assistant physician, Theodore A. Hoch, M.D.

Assistant physicians, Cornelia B. J. Schorer, M.D., Ray L. Whitney, M.D., William M. Dobson, M.D., Frank L. S. Reynolds, M.D.

Junior assistant physicians, George A. McIver, M.D., Frank H. Matthews, M.D., John G. Striegel, M.D.

Pathologist, Samuel T. Orton, M.D.

Treasurer, H. M. Quinby, M.D.

Steward, M. H. Center.

Visiting days, Wednesdays and Fridays from 10 A.M. to 12 M., and 1 to 4 P.M.

Staff meetings, Tuesdays and Thursdays, at 11 A.M.

Location, Belmont Street, Worcester, one and one-half miles from Union Station (Boston & Albany, New York, New Haven & Hartford and Boston & Maine).

TAUNTON STATE HOSPITAL (opened 1854):—

Trustees: Henry R. Stedman, M.D., Brookline, chairman; Mrs. Elizabeth C. M. Gifford, East Boston, secretary; Loyed E. Chamberlain, Brockton; James P. Francis, New Bedford; Mrs. Susan E. Learoyd, Wakefield; Simeon Borden, Fall River; Edward Lovering, Taunton.

Regular meeting, second Thursday of each month.

Superintendent, Arthur V. Goss, M.D.

Assistant physicians, Horace G. Ripley, M.D., George K. Butterfield, M.D., Raoul G. Provost, M.D., Dora W. Faxon, M.D.

Internes, J. J. Thompson, M.D., Fred H. Freeman, M.D.

TAUNTON STATE HOSPITAL (opened 1854) — *Concluded.*

Pathologist, C. G. McGaffin, M.D.

Treasurer, Frank W. Boynton.

Steward, Otis E. White.

Visiting days, Wednesdays, Saturdays, all legal holidays, second Sunday of each month.

Staff meetings, Monday, Tuesday, Wednesday, Thursday, Friday, at 8.15 A.M.

Location: Hodges Avenue, Taunton, one mile from railroad station (New York, New Haven & Hartford).

NORTHAMPTON STATE HOSPITAL (opened 1858):—

Trustees: F. W. Chapin, M.D., Springfield, chairman; Henry L. Williams, Northampton, secretary; Franklin E. Snow, Greenfield; John McQuaid, Pittsfield; Charles S. Shattuck, Hatfield; Mrs. James H. Newton, Holyoke; Miss Caroline A. Yale, Northampton.

Regular meeting, first Thursday of each month.

Superintendent, John A. Houston, M.D.

Assistant physicians, Harriet M. Wiley, M.D., Charles H. Dean, M.D., Edward W. Whitney, M.D., C. Stanley Raymond, M.D.

Treasurer and steward, Lewis F. Babbitt.

Visiting days, Tuesdays and Fridays.

Staff meetings, Wednesdays at 11 A.M.

Location, Prince Street, a continuation of West Street, Northampton, one and one-half miles from the railroad station (Massachusetts Central and Boston & Albany).

DANVERS STATE HOSPITAL (opened 1878):—

Post-office and railroad station, Hathorne (Boston & Maine).

Trustees: S. Herbert Wilkins, Salem, chairman; Miss Mary W. Nichols, Danvers; Horace H. Atherton, East Saugus; Samuel Cole, Beverly; Miss Annie M. Kilham, Beverly; Seward W. Jones, Newton Highlands; Ernest B. Dane, Boston.

Regular meeting, second Friday of each month.

Superintendent, Henry W. Mitchell, M.D.

Senior assistant physician, Henry M. Swift, M.D.

Assistant physicians, Wm. B. Cornell, M.D., Anna H. Peabody, M.D., Edwin W. Katzenellenbogen, M.D., Harlan L. Paine, M.D., Nelson G. Trueman, M.D., George Parcher, M.D.

DANVERS STATE HOSPITAL (opened 1878) — *Concluded.*

Assistant physician and pathologist, Herman M. Adler, M.D.
Treasurer, Scott Witcher.

Steward, Edward S. Groves.

Visiting days, Tuesdays and Saturdays.

Staff meetings, daily, at 8 A.M.

Location, Maple and Newbury streets, Danvers, one-quarter mile from railroad station.

WESTBOROUGH STATE HOSPITAL (opened 1886) : —

Trustees: John L. Coffin, M.D., Northborough, chairman; Miss Eliza C. Durfee, Fall River, secretary; William Avery Cary, Boston; George B. Dewson, Cohasset; John M. Merriam, Esq., South Framingham; Lewis R. Speare, Newton; Miss Sarah B. Williams, Taunton.

Regular meeting, first Thursday of each month.

Superintendent, George S. Adams, M.D.

Assistant superintendent, Henry I. Klopp, M.D.

Assistant physicians, W. W. Coles, M.D., M. M. Jordan, M.D., C. C. Burlingame, M.D., Ruth B. Coles, M.D., Esther S. Barnard, M.D., W. A. Jillson, M.D., Frances Reiger, M.D.

Pathologist, Solomon C. Fuller, M.D.

Treasurer, H. L. Davenport.

Steward, Melville L. Stacy.

Visiting days, Tuesdays and Saturdays.

Staff meetings, daily, at 12 M.

Location, two and one-quarter miles from Westborough station (Boston & Albany); one mile from Talbot Station (New York, New Haven & Hartford).

BOSTON STATE HOSPITAL (opened 1839) : —

Post-office, Dorchester Center; railroad station, Forest Hills (New York, New Haven & Hartford).

Trustees: Walter Channing, M.D., Brookline, chairman; Henry Lefavour, Boston, secretary; Mrs. Guy Lowell, Brookline; Joseph Koshland, Boston; Mrs. William H. Devine, Boston; Michael J. Jordan, Boston; William Taggard Piper, Cambridge.

Regular meeting, at the hospital on the second Tuesday of each month.

Superintendent, Henry P. Frost, M.D.

Assistant superintendent, S. W. Crittenden, M.D.

BOSTON STATE HOSPITAL (opened 1839) — *Concluded.*

Assistant physicians, George H. Maxfield, M.D., Mary E. Gill, M.D., Ermy C. Noble, M.D., Stephen E. Vosburgh, M.D.

Pathologist, Myrtelle M. Canavan, M.D.

Treasurer and steward, William E. Elton.

Visiting days, 2 to 4 P.M. daily.

Location: Women's Department, Harvard Street, Dorchester Center, near Blue Hill Avenue; Men's Department, Walk Hill Street, about one mile from Blue Hill Avenue; one and one-half miles from railroad station.

WORCESTER STATE ASYLUM (opened 1877) :—

Trustees: trustees of Worcester State Hospital.

Superintendent and treasurer, Ernest V. Scribner, M.D.

Assistant physicians, H. Louis Stick, M.D., Arthur E. Pattrell, M.D., B. Henry Mason, M.D., Ransom A. Greene, M.D., Jonathan H. Ranney, M.D.

Pathologist, Frederick H. Baker, M.D.

Visiting days, every day except Sunday.

Location, Summer Street, Worcester, five minutes' walk from Union Station (Boston & Albany, Boston & Maine and New York, New Haven & Hartford).

MEDFIELD STATE ASYLUM (opened 1896) :—

Post-office, Harding; railroad station, Medfield Junction (New York, New Haven & Hartford).

Trustees: Ira G. Hersey, Hingham, chairman; Mrs. Nellie Palmer, South Framingham, secretary; William O. Blaney, Boston; Francis M. Carroll, Boston; F. B. Lund, M.D., Boston; James M. Codman, Brookline; Mrs. Sarah Rand, Newton Center.

Regular meeting, first Thursday following the first Tuesday of each month.

Superintendent, Edward French, M.D.

Assistant physicians, Lewis M. Walker, M.D., Helen T. Cleaves, M.D., George A. Troxell, M.D., Walter Burrier, M.D.

Treasurer, Chas. C. Blaney.

Steward, F. H. Gross.

Visiting days, Tuesdays and Fridays.

Location, Asylum Road, one mile from Medfield Junction railroad station.

GARDNER STATE COLONY (opened 1902) :—

Post-office, Gardner; railroad station, East Gardner.

Trustees: Edmund A. Whitman, Cambridge, chairman; Mrs. Amie H. Coes, Worcester, secretary; William H. Baker, M.D., Lynn; John G. Blake, M.D., Boston; George N. Harwood, Barre; Mrs. Alice Miller Spring, Fitchburg; Wilbur F. Whitney, Ashburnham.

Regular meeting, first Friday occurring on or after the fourth day of each month.

Superintendent and treasurer, Charles E. Thompson, M.D.

Assistant superintendent, Thomas Littlewood, M.D.

Assistant physician, Paul R. Felt, M.D.

Visiting days, every day except Sundays and holidays, from 10 A.M. to 4 P.M. (Sundays and holidays by permission).

Location, Chapel Street, two minutes' walk from East Gardner railroad station.

MENTAL WARDS, STATE INFIRMARY (opened 1866) :—

Post-office, Tewksbury; railroad stations, Tewksbury (Western Division, Boston & Maine), Tewksbury Junction and Salem Junction (Southern Division, Boston & Maine).

Trustees: John B. Tivnan, Salem, chairman; Rev. Payson W. Lyman, Fall River, secretary; Leonard Huntress, M.D., Lowell; Emery M. Low, Brockton; Mrs. Anna F. Prescott, Boston; Joseph A. Smart, Andover; Helen R. Smith, Newton Center.

Regular meeting, usually during last week of month, alternately at State Infirmary and State Farm.

Superintendent, John H. Nichols, M.D.

Assistant superintendent and physician, George A. Peirce, M.D.

First assistant physician, Howard F. Holmes, M.D.

Assistant physicians, Alfred J. Roach, M.D., Ernest T. F. Richards, M.D., Sherman Perry, M.D., Harry R. Coburn, M.D., George P. Laton, M.D., Walter H. Crosby, M.D., Hanford Carvell, M.D., Anne E. Barker, M.D.

Internes, Thomas V. Uniac, Fred M. Hollister, Clarence B. Kenney, Charles L. Trickey, Dennis L. Black, Alfred W. Gwinnell.

Visiting days, every day except Sundays and holidays, from 10 A.M. to 4 P.M.

Staff meetings, Mondays, at 1.30 P.M. and 7 P.M.

MENTAL WARDS, STATE INFIRMARY (opened 1866) — *Concluded.*

Location, about one-half mile from railroad station and from electric cars.

Coach from infirmary meets almost every train.

BRIDGEWATER STATE HOSPITAL (opened 1886, 1895):—

Post-office, State Farm; railroad station, Titicut (New York, New Haven & Hartford).

Trustees: trustees of State Infirmary and State Farm.

Medical director, Alfred Elliott, M.D.

Assistant physician, Leonard A. Baker, M.D.

Interne, Arthur J. Nugent, M.D.

Visiting days, every day except Sundays.

Staff meetings, usually daily, at 11 A.M.

Location, one-quarter mile from railroad station.

MONSON STATE HOSPITAL (opened 1898):—

Post-office and railroad station, Palmer (Boston & Albany).

Trustees: William N. Bullard, M.D., Boston, chairman; John Bapst Blake, M.D., Boston, secretary; Edward P. Bagg, Holyoke; Henry P. Jaques, M.D., Lenox; Walter W. Scofield, M.D., Dalton; Mrs. Mabel W. Stedman, Brookline; Mrs. Mary P. Townsley, Springfield.

Regular meeting, first Friday of each month.

Superintendent, Everett Flood, M.D.

Assistant physicians, Morgan B. Hodskins, M.D., Alden V. Cooper, M.D., Frederick W. Guild, M.D., Edmund S. Douglass, M.D.

Pathologist and research officer, Leland B. Alford.

Treasurer, Walter E. Hatch.

Steward, Charles F. Simonds.

Visiting days, Tuesdays and Fridays.

Staff meetings, Mondays and Saturdays, at 11.30 A.M.

Location, one mile from railroad station.

FOXBOROUGH STATE HOSPITAL (opened 1893):—

Trustees: Robert A. Woods, Boston, chairman; William H. Prescott, Boston, secretary; Philip R. Allen, East Walpole; Timothy J. Foley, Worcester; Frank L. Locke, Malden; Edwin Mulready, Rockland; W. Rodman Peabody, Cambridge.

FOXBOROUGH STATE HOSPITAL (opened 1893) — *Concluded.*

Regular meeting, first Wednesday of each month.

Superintendent and treasurer, Irwin H. Neff, M.D.

Senior assistant physician, Frank H. Carlisle, M.D.

Junior assistant physician, Fred Porter Moore, M.D.

Steward, Nelson Crosskill.

Visiting days, every day except Sundays. (Sunday visiting allowed only by special permission from superintendent.)

Staff meetings, Mondays, Wednesdays and Fridays, at 11 A.M.

Location, Chestnut Street, one mile from Foxborough station (New York, New Haven & Hartford).

Out-patient department, 28 Court Square, Boston.

MASSACHUSETTS SCHOOL FOR THE FEEBLE-MINDED AT WALTHAM
(opened 1848): —

Post-office and railroad station, Waverley (Boston & Maine).

Trustees appointed by the Governor: William W. Swan, Brookline, president; Francis J. Barnes, M.D., Cambridge; Mrs. Luann L. Brackett, Newton; Thomas W. Davis, Boston; Felix Gatineau, Southbridge; Edmund M. Wheelwright, Boston.

Trustees appointed by the corporation: Frank G. Wheatley, M.D., North Abington, vice-president; Charles E. Ware, Fitchburg, secretary; Chas. Francis Adams, 2d, Concord; Frederick P. Fish, Brookline; Joseph B. Warner, Boston; Stephen M. Weld, Dedham.

Quarterly meeting, second Thursday of October, January, April and July.

Superintendent, Walter E. Fernald, M.D.

Assistant physicians, Winfred O. Brown, M.D., Frederic J. Russell, M.D., Annie M. Wallace, M.D., Edith Woodill, M.D.

Treasurer, Richard C. Humphreys.

Visiting days, Wednesday, Thursday and Saturday afternoons.

Staff meetings, daily, at 9 A.M.

Location, near Clematis Brook station (Fitchburg Division, Boston & Maine); about one mile from Waverley Station (Fitchburg Division and Massachusetts Central Division, Boston & Maine).

WRENTHAM STATE SCHOOL (opened 1907):—

Post-office and railroad station, Wrentham.

Trustees: Albert L. Harwood, Newton, chairman; Ellerton James, Nahant, secretary; Patrick J. Lynch, Beverly; George W. Gay, M.D., Newton; Susanna W. Berry, Lynn; Herbert Parsons, Greenfield; Mary Stewart Scott, Worcester.

Regular meeting, second Thursday of each month.

Superintendent and treasurer, George L. Wallace, M.D.

Visiting days, every day.

Location, State Road and North Street, Wrentham, one mile from railroad station (New York, New Haven & Hartford).

THE HOSPITAL COTTAGES FOR CHILDREN, BALDWINVILLE (opened 1882):—

President, Herbert S. Morley, Baldwinville; clerk, Robert N. Wallis, Fitchburg.

Trustees appointed by the Governor: George B. Dewson, Cohasset; Jenness K. Dexter, Springfield; Mrs. William W. Doherty, Boston; Arthur H. Lowe, Fitchburg; Herbert S. Morley, Baldwinville.

Trustees appointed by the corporation: John M. Bemis, M.D., Worcester; Mrs. James B. Case, Boston; Mrs. William S. Clark, Worcester; Homer Gage, M.D., Worcester; Mrs. K. M. Gilmore, Boston; Mrs. Edward L. Greene, Lancaster; Mrs. George Heywood, Gardner; Rev. J. S. Lemon, Gardner; Mrs. Winslow S. Lincoln, Worcester; Mrs. Geo. T. Plunkett, Hinsdale; Frederick W. Russell, M.D., Winchendon; Frederick P. Stone, Otter River; Frederic A. Turner, Jr., Boston; Gilman Waite, Baldwinville; Robert N. Wallis, Fitchburg; Mrs. Sarah E. Whitin, Whitinsville.

Quarterly meeting, third Wednesday of January, April and July, and second Wednesday of October.

Superintendent, Hartstein W. Page, M.D.

Assistant physicians, Mildred A. Libby, M.D., L. Maude Warren, M.D.

Treasurer, George L. Clark.

Visiting days, every day except Sundays.

Location, Hospital Street, one mile from railroad station (Ware River Branch, Boston & Albany, and Boston & Maine).

PRIVATE.

McLEAN HOSPITAL (opened 1818) :—

Department of Massachusetts General Hospital Corporation;
post-office and railroad station, Waverley (Boston & Maine).

President, Francis C. Lowell, Boston; treasurer, C. H. W.
Foster, Needham; secretary, John A. Blanchard, Boston.

Trustees appointed by the Governor: Henry S. Howe, Boston;
Henry S. Hunnewell, Wellesley; David P. Kimball, Boston;
Charles P. Greenough, Boston.

Trustees appointed by the corporation: Henry P. Walcott,
M.D., Boston, chairman; Francis H. Appleton, Boston;
Nathaniel T. Kidder, Boston; C. H. W. Foster, Needham;
Nathaniel Thayer, Boston; George Wigglesworth, Boston;
Moses Williams, Boston; Francis L. Higginson, Boston.

Regular meeting, usually at New England Trust Company of
Boston, on Friday, at intervals of two weeks beginning six-
teen days after the first Wednesday in February.

Superintendent, George T. Tuttle, M.D.

First assistant physician, Frederick H. Packard, M.D.

Second assistant physician, Earl D. Bond, M.D.

Assistant physician and pathologist, E. Stanley Abbott, M.D.

Assistant in pathological chemistry, Charles C. Erdmann, A.B.

Assistant in pathological psychology, F. Lyman Wells, Ph.D.

Junior assistant physicians, Edmund M. Pease, M.D., Clarence
M. Kelley, M.D.

Visiting days, week days.

Staff meetings, regularly, Tuesdays, at 8.30 A.M.; irregularly,
on other days at the same hour.

Location, Pleasant Street, one-third mile from railroad station.

BOURNEWOOD, Henry R. Stedman, M.D., South Street, Brookline.

Railroad station, Bellevue (Dedham Division, New York,
New Haven & Hartford). Fifteen minutes' walk. Car-
riage by previous arrangement.

THE HIGHLANDS, Frederick W. Russell, M.D., Winchendon (Fitch-
burg). Carriage.

CHANNING SANITARIUM, Walter Channing, M.D., Brookline. Rail-
road station, Reservoir (Boston & Albany). Carriage. Or
Chestnut Hill street car to Chestnut Hill Avenue.

PRIVATE HOSPITAL, Eben C. Norton, M.D. Post-office, Norwood; railroad station, Norwood Central (New York, New Haven & Hartford).

PINE TERRACE, W. F. Robie, M.D., Baldwinville.

HERBERT HALL HOSPITAL, John Merrick Bemis, M.D., Salisbury Street, Worcester. Carriage.

NEWTON SANATORIUM, N. Emmons Paine, M.D., West Newton. Carriage. Or Newton Boulevard street car to Washington Street.

WELLESLEY NERVINE, Edward H. Wiswall, M.D., Washington Street, Wellesley.

LOCUST GROVE ASYLUM, Miss Alice R. Cooke; medical director, George E. White, M.D., Sandwich. Carriage.

DR. RING'S SANATORIUM, Allan Mott Ring, M.D., Arlington Heights. Carriage.

FRAMINGHAM NERVINE, Ellen L. Keith, M.D., Winter Street, Framingham.

PRIVATE HOSPITAL, J. F. Edgerly, M.D., 1 Mt. Vernon Terrace, Newtonville.

HIGHLAND HALL, Samuel L. Eaton, M.D., 340 Lake Avenue, Newton Highlands.

DR. REEVES' NERVINE, Harriet E. Reeves, M.D., 283 Vinton Street, Melrose Highlands.

PRIVATE HOSPITAL, George B. Coon, M.D., East Walpole. (Wrentham Branch, New York, New Haven & Hartford, or Norwood Central trains and electrics.)

WHEELER SANITARIUM, Mrs. Maria H. Paul, 32 Copeland Street, Roxbury. Elevated to Dudley Street; Warren Street car.

ARLINGTON HEALTH RESORT, Arthur H. Ring, M.D., Arlington Heights. Carriage.

PRIVATE HOSPITAL, Edward B. Lane, M.D., Wellesley. Address, 419 Boylston Street, Boston.

ELM HILL PRIVATE SCHOOL AND HOME FOR THE FEEBLE-MINDED, George A. Brown, M.D., Barre (Southern Division, Boston & Maine).

PRIVATE HOSPITAL, H. N. Archibald, M.D. Post-office, Cheshire. (Boston & Albany to Pittsfield or North Adams.) Electrics to Cheshire.

PRIVATE HOSPITAL, Henry C. Baldwin, M.D., Wareham. (Old Colony Division, New York, New Haven & Hartford.) Carriage.

NEWTON NERVINE, Edward Mellus, M.D., West Newton. Carriage. Or Newton Boulevard street car to Washington street.

GLENSIDE, Mabel D. Ordway, M.D., 71 Glen Road, Jamaica Plain.

CONECROFT, Robert T. Edes, M.D., 340 Summer Avenue, Reading. (Portland Division, Boston & Maine.) Carriage.

TERRACE HOME SCHOOL, Miss F. J. Herrick, Amherst. (Central Massachusetts Branch, Boston & Maine.) Carriage.

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